The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 964—Vol. XXIV.] LONDON, SATURDAY, FEBRUARY 11, 1854. [Price (with supplement) 6d.

MR. JAMES CROFTS, of No. 48, THREADNEEDLE STREET, MINING BROKER.

Mr. J. CROFTS begs to OFFER his SERVICES for the PURCHASE or SALE of MINING SHARES of every description, and not being a DEALER, transacts business only for principals on commission.

Mr. CROFTS having resolved to extend his business, more generally in reference to DIVIDEND MINES, has on hand, or can procure, the best of those appearing in the London market, and in the columns of the *Mining Journal*, which, judiciously selected, will pay the highest rate of interest of any known security.

The following PROGRESSIVE MINES are recommended for immediate investment at the present low and moderate prices:—

Wheal Fanny	Penmaen	Sortridge Consols	Peninsular Copper
Caradon Wood	Cubert Keswick	Cwm Darren	Lackamore Copper
West Sortridge	Wh. Exmo. & Adams	East Russell	Yeoland Consols
Treleigh	Quintrell Downs	Great Crinnis	Wheal Venton
Great Dinas	West Par Consols	Eaglebrook	Wheal Wrey
Tremolett Down	New Linares	Perran Silver-lead	Wheal Golden
Devon Kapunda	West Wheal Jane	Treweatha	Tavy Consols
Castle Dinas	Wheal Jane	West Basset	Britannia Gold
Devon United	Lamiker. Wh. Maria	Poltimore	South Devon Cons.

Mr. CROFTS transacts every description of business through the medium of the Stock Exchange.

Discoveries of GOLD, the result of science, have been made in numerous British mines, the list of which is constantly increasing. Mr. CROFTS will be happy to give information and advice respecting investments in these mines, with a view to their being made at moderate prices.

Dated Friday, Feb. 10, 1854, No. 48, Threadneedle-street.

ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, No. 3, OLD BROAD STREET, LONDON.

Mr. PETER WATSON is instructed to SELL the following SHARES, at the extreme LOW PRICES attached:—

5 Alfred, £26.	50 East Wh. Arthur, 7s. 6d.	50 Rorrington, 15s.
5 Augusta Consols, 6s.	5 East Buller, £6¼.	10 St. Aubyn & Grylls, £5¼
10 Alfred, £26¼.	50 Fursdon Manor, 8s.	50 Tamar, £1¾.
30 Bat Holes, £2½.	20 Great Baddern, £1¾.	5 Tokenbury, £4.
1 Bell and Lanarth, £12.	100 Great Tregune.	55 Tincroft, £5¼.
50 Blaen Caylen, 11s.	20 Garreg, £1.	150 Trescllyn Cons., 5s. 6d.
2 Brewer, £13¼.	5 Gilmar, £5¾.	½ Tresavean, £130.
1 Boscean, £103.	25 Herodscombe, £1.	1 Treviskey, £47.
100 Bargally, 5s. 6d.	100 Havon, 13s. 6d.	50 Thomas United, £1¾.
90 Brit. and Col. Smelting and Reduction Co., 15s	25 Hawkmoor, £1.	50 Vale of Towy, 13s.
5 Bedford, £9¾.	25 Hope Valley, £4.	800 Wheal Hosking, 20s.
1 Bell & Lanarth, £15¾.	25 Kilbricken, 30s.	50 Wheal Guskus, 34s.
25 Callington, £2¼.	35 Lewis, £1½.	20 Wheal James, 18s.
50 Clive, £1.	50 Mendip Hills, £3¼.	50 West Wh. Arthur, £¾.
5 Caradon Consols, £11.	1 Mary Ann, £37¾.	1 Wh. Trelawny, £38¾.
10 Castle Dinas, 13s.	25 Molland, 8s.	30 West Abraham, £3¼.
10 Cwm Darren, 15s.	1 North Pool, £200.	25 Wheal Unity, £3.
25 Drake Walls, £2¾.	50 Nanteos, £1¼.	10 West Ding Dong, £5½
5 East Crowndale, £5¾.	50 North Vale of Towy, 15s	2 West Providence, £38.
5 Esgair Llee, £14.	2 Pen-y-Gelli, £10.	10 Wheal Arthur, £33.
5 East Frongoch, £5.	20 Pendeen £3¼.	5 West Alf. Cons., £16¾.
10 East Tamar, 17s. 6d.	5 Penhauger, £1¾.	50 West Polberro, £2.
1 East Tolgus, £18½.	5 Proekter United, 16s.	5 Wh. Trebarvah, £5½.
	100 Reeth Cons., £2 1s. 3d.	150 Wheal Maudlin, £¾.
	35 Round Hill, £4½.	5 West Stray Park, £8.

Is a BUYER of 28 South Tamar, £6½; 10 Tavy, £2¾; 20 Zion, £2¾; 20 Castle Dinas, 10s.; 20 Cwm Darren, 14s.

The present period offers to capitalists a favourable opportunity for purchasing in mines paying dividends from 15 to 25 per cent., as well as in progressive mines, which, by holding for a time, will produce to the purchaser good profits. Mr. PETER WATSON will at all times give the best information (having been in business nine years), and also BUY and SELL SHARES on the usual commission.

MR. JOHN S. LANE, No. 32, POULTRY, LONDON, begs to inform the public that he is in a position to OFFER SHARES in the following MINES:—

Alfred Consols	East Bosorn	Perran Wheal Jane	Victoria
Alfred, Great	East Buller	Perran Silver-lead	Wheal Sarah
Augusta Consols	East Wheal Vor	Rinsey United	Wheal Norris
Arundell	Eaglebrook	Perran Wh. Alfred	Wheal Eckley
Berriow	Fat-work & Wh. Virt.	Porkellis	Wheal Mary Ann
Broomfield Consols	Gawton United	Prince Albert Cons.	Wheal Golden
Boringdon Consols	Great Wh. Baddern	Peninsular Min. Co.	Wheal James
Bell and Lanarth	Great Sheba Consols	Penzance Consols	Wheal Zion
Black Craig	Gorn Lead	Rorrington Consols	Wheal Prockter
Britannia	Great Crinnis	So. Dev. Gt. Consols	Wheal Robert
Boscean	Great Wheal Hugo	South Crenver	Wheal Jane
Balnoon	Great Hewas	South Towy	Wheal Frances
Bedford United	Great Bryn	South Carn Brea	Wheal Tremayne
Bryntail	Gonamena	South Russell	Wheal Katharine
Clive	Hemerdon Consols	South Wh. Yeoland	Wheal Wrey
Cwm Erfin	Langford & Baring	South Plain Wood	Wheal Gill
Caradon Wood	Liberty	Silver Brook	Wheal Reeth
Castle Dinas	Linares	Sortridge Consols	Wheal Samson
Combmartin Consols	Hingston Down	Sourton Consols	Wheal Lemon
Cefn Gwyn	Loveden United	St. Austell Consols	Wh. Fort., So. Taw.
Cubert	Marke Valley	Sydney	Wheal Surprise
Cook's Kitchen	Merllyn	Sydney Godolphin	West Wh. Edward
Condurrow	Molland	Trebell	West Damsel
Cwm Darren	Mendip Hills	Treviskey & Barrier	West Carpenter
Crookhaven	Monareh	Tassan Lead	West Wheal Jane
Churchstoke	Mixon Great Cons.	Tavy Consols	West Darlington
Dolcoath	North Wh. Robert	Treweatha	West Phœnix
Devon Kapunda	North Caradon	Trumpet Consols	West Providence
Devon & Courtenay	North Damsel	Trehane	West Basset
Devon Great Cons.	North Tamar	Tincroft	West Wheal Buller
Dinas Great Copper	North Towy	Tamar Maria	Wheal Maudlin
Darren	North Downs	Treleigh Consols	Weston
East Seton & Maude	No. Wh. Trelawny	Tremollett Down	Worthing
East Caradon	New E. Crowndale	Tryphena	Whitford
East Pool	Par Consols	Trannack & Bosence	Wheal Uny
East Wheal Russell	Poltimore	Tamar Consols	Yeoland Consols

J. S. LANE is a BUYER of Wheal Gill, Great Crinnis, East Caradon, Sortridge Consols, Marke Valley, Poltimore, Boringdon Consols, Wheal Mary Ann, Treweatha, Sheba Consols, South Caradon, Wheal Edward, Wheal Uny, &c.

JOHN R. PIKE HAS NOW FOR SALE THE FOLLOWING SHARES:

Alfred Consols, £25¼.	East Ding Dong, £1¾.	St. Day United, £2¾.
Alfred, Great, £32.	East Halamanning, 12s. 6d	Stray Park, £12½.
Bell and Lanarth, £13.	Great Fortune, £15.	Tamar Maria, 12s. 6d.
Brewer, £13.	Gilmar, £5½.	Trefusis, £17½.
Balnoon, £3 3s.	Garreg, 17s. 6d.	Treluaback, £4.
Ballyhickey, 10s.	Hawkmoor, £¾.	Treloweth, £7¼.
Bronfloyd, 9s.	Kilbricken, £1¾.	Tremayne, £10.
Boscean, £95.	La Min, £3.	Trelawny, £39.
Bedford United, £9¼.	Lelant Consols, £20.	United Mines, £205.
Chiverton, £8.	Merllyn, £1½.	Wheal Uny, £11½.
Cathedral, £23¾.	Molland, 8s.	Wheal Zion, £3½.
Cwm Darren, 15s.	Mary Ann, £39.	Wheal Edward, £3.
Castle Dinas, 17s. 6d.	Mostyn, 7s. 6d.	Wheal Elizabeth, £1¾.
Cook's Kitchen, £3.	Michell, 7s. 6d.	West Providence, £36½.
Clowance Wood, 8s.	North Ding Dong, 7s. 6d.	West Darlington, £5.
Good Mawr Pool, £9½.	North Buller, £8¼.	Wheal Cupid, £6¾.
Cubert, 15s.	North Hingston, 4s. 6d.	Whitford, 7s. 6d.
Drake Gynon, 15s.	Porkellis United, £9½.	Wood Mine, 5s.
Carpenter (Gwinear), £6½.	Perran Silver-Lead, 7s.	Wheal Maudlin, 6s.
Devon United, £2¼.	Raleigh, £2¼.	Wheal Crebor, £2¾.
East Tamar, £1.	South Tolgus, £140.	

And is a BUYER of Wheal Seton, Boscundle, and East Pool.

Purchases or Sales in English and Foreign Mining Shares effected on the best possible terms, for the usual commission.

In any instructions forwarded to J. R. Pike for the disposal of shares, it is particularly requested that the number and time allowed may be stated; and that all such information may be forwarded on or before Friday morning.

South Sea Chambers, Threadneedle-street, City, Feb. 10, 1854.

MR. HENRY GOULD SHARP, MINING AGENT, CROSBY HALL CHAMBERS, LONDON, has FOR SALE:—

15 Alfred Consols.	50 Gt. Wh. Tonkin, 5s.	50 Tremoll. Down, 8s. 6d.
30 Augusta Cons., 7s.	70 Hawkmoor, 15s. 6d.	4 Trehane.
50 Britannia, 13s. 6d.	20 Kirkcudbright.	40 Tassan Lead, 7s.
90 Broomfield Con., 4s.	100 Molland, 7s. 6d.	50 Trenault, 10s.
30 Cwm Darren, 15s. 6d.	30 Mineral Court, 7s.	40 Trevellyn, £3¼.
20 Combm. Cons., 7s. 3d.	30 North Caradon, 5s.	10 Wh. Fort. (So. Taw.), 5s.
90 Drewsteignton, 12s. 9d	35 Pencorse Con., 30s.	
90 Devon Kapunpa, 22s.	90 South Tawton, 12s. 3d.	10 Wheal Robin, £2¼.
90 East Bosorn (£1 pd.), 6s.	50 Tamar Maria (£1 pd.), 9s	100 Worthing, 4s.

And will BUY 20 Mixon, 30 East Alfred Consols.

P.S. Mr. SHARP begs to call the attention of the public to the present favourable opportunity of investing in mines, and will be happy to afford every information to parties wishing to embark in mining speculations. Every description of shares bought and sold at the closest market prices of the day.

MINING PROPERTY.—Mr. HERRON has SHARES in the best DIVIDEND-PAYING MINES FOR SALE, and which will give the purchaser 15 to 20 per cent. for the outlay. Amongst others are the following:—

Carn Brea	Alfred Consols	North Pool	Great Devon Consols
Wheal Seton	South Basset	Trelawny	Imperial Brazilian
Treviskey	West Basset	Trehane	St. John del Rey
Wheal Arthur	North Basset	Treweatha	Alten
Bedford United	South Caradon	Mary Anne	Cobre
United Mines	West Caradon	South Tamar	

And has also FOR SALE SHARES in MINES having a PROMISING APPEARANCE, and affording greater range for speculation, such as—

Molland	Stray Park	Wheal Uny	Great Alfred
Gilmar	Tincroft	Halamanning	Speedwell
Tamar Consols	Treleigh	North Damsel	Gonamena
East Tamar	North Downs	North Downs	Grambl. & St. Aubyn
East Russell	Wheal Cupid	Bryntail	Garreg
Hingston Down	Wheal Harriett	Cwm Darren	North Vale of Towy
Trefusis	East Buller	Thomas United	

Mining Offices, 33, Clement's-lane, Lombard-street.

MR. JAMES LANE, MINING AGENT, 33, THREADNEEDLE STREET, LONDON (Established 10 Years), begs to inform his friends and the public, that the SHARES which he is prepared to DEAL IN are not confined to the limits of an advertisement, but would refer to the general list of the *Mining Journal*, and is in a position to TRANSACT BUSINESS in any mines quoted in that list. Mr. LANE will furnish a list with latest prices on application.

MINING AGENCY OFFICES, No. 33, CLEMENT'S LANE, LOMBARD STREET.

JAMES S. TRIPP and CO. have established AGENTS in all the principal MINING DISTRICTS, and therefore command reliable information for the guidance of the capitalist, and facilities for the TRANSACTION OF BUSINESS to any amount, with the utmost promptitude, and upon the best possible terms.—Established 1839.

THOMPSON AND CO. (Established 1796), CONSULS for VARIOUS COUNTRIES; AGENTS for the FRENCH and HAMBURG UNDERWRITERS and AUSTRIAN LLOYD'S; NORTH SHIELDS, NEWCASTLE-ON-TYNE, and HARTLEPOOL.—SHIPPERS OF COAL, COKE, IRON, &c.

MR. CAREY, MINING AGENT, TRANSACTS BUSINESS in BRITISH and FOREIGN MINES, in INSURANCE, BANKING, and RAILWAY SHARES, at the closest prices of the day.
6, Moorgate-street, City.

MESSRS. POWELL AND COOKE, MINING AGENTS, No. 1, CROWN COURT, THREADNEEDLE STREET, LONDON, beg to direct the attention of capitalists to the present almost UNPRECEDENTED OPPORTUNITY for INVESTMENT of CAPITAL in DIVIDEND MINES, paying regularly from 12½ to 20 per cent. per annum; also, in legitimate PROGRESSIVE MINES, many of which, from their present prospects and prices, offer an opportunity scarcely approaching to speculation.

Mining property, whether dividend or progressive, if judiciously selected, seldom fails to become remunerative; and Messrs. Powell and Cooke will feel much pleasure in assisting parties to such selection, feeling convinced of giving satisfaction to those with whose confidence they may be entrusted.

Bankers—Commercial Bank of London, Lothbury.

Messrs. POWELL AND COOKE have BUSINESS TO TRANSACT in the undermentioned DIVIDEND MINES:—

Alfred Consols	Devon Gt. Consols	Spearne Consols	Wheal Arthur
Bedford United	South Tamar	Trewetha	Wheal Trelawny

Also, in PROGRESSIVE MINES of great promise, such as—

Boringdon Consols	Great Wh. Baddern	South Yeoland	Wheal Russell
Devon Burra Burra	Hingst. Down Cons.	Tavy Consols	Wheal Tryphena
East Alfred Consols	North Wh. Robert	West Par Consols	Yeoland Consols

MR. JOSEPH JAMES REYNOLDS, STOCK & SHAREBROKER, 21, THREADNEEDLE STREET.

Mr. REYNOLDS has BUSINESS TO TRANSACT in the following MINES:—

Agua Fria	East Wheal Rose	Peninsular Min. Co.	Venton
Alfred Consols	East Wheal Russell	Penllyne Court	Wellington
Anglo-Californian	Esgair Llee	Penzance Consols	West Abraham
Asa and Craigiog	Exmoor Eliza	Perran (silver-lead)	West Alfred Consols
Balnoon | Beacon	Four Dargue (Cum.)	Perran St. George	West Basset
Bedford United	Garreg	Phœnix Great Cons.	West Caradon
Bell and Lanarth	Gawton United	Poltimore	West Crinnis
Bicton Consols	Gillmar	Port Phil. & Col. Gold	West Damsel
Black Craig	Gonamena	Prince Albert	West Darlington
Bodmin Consols	Grambl. & St. Aubyn	Quintrell Downs	West Ding Dong
Boringdon Consols	Great Beam	Raleigh	West Stray Park
Boscaswell Downs	Great Bryn Consols	Red Dragon	W. Phœnix (free sh.)
Boscean | Botallack	Great Crinnis	Rix Hill	West Providence
Bottle Hill	Gt. Nugget Vein Co.	Round Hill (Salop)	West Russell
Brewer	Great Phœnix Cons.	Silver Valley	West Seton
Bridford Consols	Great Sheba Consols	Sourton Consols	West Sharp Tor
Britannia Gold & Cop.	Great Work	South Caradon	West Treasury
Bronfloyd	Great Wheal Alfred	South Carn Brea	West Trethellan
Butterdon	Great Wh. Baddern	South Condurrow	West Wheal Alfred
Callington	Great Wheal Fortune	South Frances	West Wheal Frances
Calstock Consols	Great Wheal Vor	South of Scotland	West Wheal Robins
Caradon Wood	Gwallon	South Tamar	West Wheal Russell
Carn Brea	Halamanning	South Tolgus	West Wh. Treasury
Carsons Creek	Havon & Henfiwch	South Towey	Weston
Carvannall	Herodsfoot	South-West Phœnix	Wheal Augusta
Castle Dinas	Irish Con. Mining Co.	South Wheal Basset	Wheal Brewer
Cathedral	Kenneggy	South Wheal Lovel	Wheal Buller
Chiverton	Kilbricken	South Wheal Russell	Wheal Catherine
Clive | Colonial	Leeds and St. Aubyn	Spearne Consols	Wheal Carpenter
Combmartin Consols	Leeds Town Consols	Speedwell	Wheal Comford
Comford	Lelant Consols	St. Aubyn & Grylls	Wheal Clifford
Condurrow	Levant	St. Day United	Wheal Gills
Coniston United	Lewis	St. Ive's Consols	Wheal Golden
Cook's Kitchen	Linares	Stoke Climsland Con.	Wh. Ellen (Breage)
Copper Hill	Little Duke	Stray Park	Wh. Enys (Wendron)
Craddock Moor	Marke Valley	Swanpool	Wheal Fanny
Crane and Bejawas	Mary Ann	Tamar Consols	Wheal Fatwork
Crow Hill | Cubert	Mendip Hills	Tavy Consols	Wh. Fort. (Breage)
Cupid	Merllyn Michell	Tees Side	Wheal James
Cwm Darren	Mill Pool Mixon	Terthevy	Wheal Jane
Cwm Erfin	Molland Mostyn	Thomas's United	Wheal Kitty
Dalrhiew | Darren	Nansegollan	Tincroft	Wh. Kitty (St. Agnes)
Devon Burra Burra	Nantile Vale (slate)	Trannack & Bosence	Wheal Lemon
Devon Cons. North	Nant-y-Car	Trebarvah	Wheal Lovel
Devon Great Consols	Neptune	Trebell Consols	Wheal Plenty
Devon Kapunda	New Linares	Trefusis	Wheal Prockter
Devon United	North Basset	Trehane	Wheal Russell
Dolcoath	North Buller	Trelawny	Wheal Reeth
Duke of Cornwall	North Caradon	Treloweth	Wheal Robin
Dyfngwin	North Cornwall	Trelusbeck	Wheal Samson
East Alfred Consols	North Damsel	Tresavean	Wheal Seton
East Basset	North Frances	Trethellan	Wheal Squire
East Black Craig	North Levant	Trevena	Wheal Surprise
East Wheal Crofty	North Pool	Treveiyan	Wheal Tehidy
East Darren	North Roskear	Treviskey & Barrier	Wheal Trebarvah
East Ding Dong	North Wheal Robert	Tristem	Wheal Trefusis
East Frongoch	North Wh. Trelawny	Trumpet Consols	Wheal Trelawny
East Halamanning	Nouveau Monde	Tyn-y-Worglod (sl.)	Wheal Tremayne
East Margaret	Okel Tor	Tywardreath	Wheal Tryphena
East Pool	Old Wheal Basset	Tywarnhayle	Wheal Seton
East Russell	Orsedd	Ulpha United	Wheal Uny
East Seton & Maude	Par Consols	Union Tin	Wheal Wrey
East Tamar	Parkwyn & Carwals.	Unity Consols	Wheal Zion
East Tolgus	Pembr. & E. Crinnis	United Mines (Tav.)	Whitford
East Wheal Buller	Pendarv. & St. Aubyn	United Mines (Gwe.)	Wood Mine
East Wheal Reeth	Penhale Consols	Vale of Towy	Wrysgan (slate)

And SHARES FOR SALE in the West Cornwall Railway.

The present period offers to capitalists an opportunity which rarely occurs for PURCHASING in DIVIDEND-PAYING MINES, as well as in PROGRESSIVE MINES, the former paying dividends not less than 15 per cent., and the latter by a considerable increase of profit on the improved value of the property. Mr. J. J. REYNOLDS is at all times in a position to FURNISH the most ACCURATE INFORMATION for the guidance of capitalists, and to effect PURCHASES or SALES on stock of every description, upon the best possible terms, on the usual commission.

Mines inspected by agents of experience and high respectability in any part of the kingdom within the shortest notice.—Feb. 10, 1854.

MESSRS. KENWORTHY AND CO., MINING BROKERS, 37, OLD BROAD STREET, LONDON, continue to BUY and SELL (ON COMMISSION) BRITISH and FOREIGN MINING SHARES, and have at the present period SPECIAL BUSINESS in the following:—

Broomfield Consols	Lelant	Quintrell Down	Tassan
Combmartin	North Down	South Devon Consols	Thomas United
Carnyorth	North Buller	South Towy	United Mexican
Devon Burra Burra	Parkwyn & Carwals.	Tamar Maria	Wildberg
Eaglebrook	Prignant Consols	Tremollet Down	Wheal Zion
Great Crinnis	Perran Silver-lead	Tresellyn	Wheal Lemon
Herodsfoot	Poltimore	Treviskey	Wheal Frances

Offices of the Cuddra Copper and Silver-lead Mine.

GEORGE MOORE HAS FOR SALE TO-DAY:—

5 Black Craig, £3¾.	2 Gonamena, £14.	50 St. Day United, £3¼.
4 Bell & Lanarth, £11¾.	50 Hawkmoor, 14s.	5 Treloweth, £6¾.
20 Bicton Consols, 10s. 6d.	100 Harriett Sophia, 10s.	10 Treweatha, £4 14s. 6d.
50 Birch Tor, 10s. 6d.	10 Kilbricken, £1½.	20 Tavy Consols, £3¾.
15 Charlotte, £10.	30 Keswick, £1¼.	150 Tremol. Down, 7s.
10 Chiverton, £8¼.	10 Kea Tremayne, £1½.	5 West Alfred Cons., £17.
50 Cwm Darren, 15s. 6d.	10 Kenneggy, £3.	100 West Jane, £2 6s. 6d.
2 Comford, £36.	50 Loveden United, 10s. 6d	100 West Sortridge, 5s.
100 Combmartin, 7s. 6d.	100 Molland, 7s. 3d.	100 West Aberyfryd, 6s. 6d.
50 Calstock Uni., £1 10s. 6d	30 Mineral Court, 7s.	100 Wheal Golden, £1¾.
150 Caradon Wood, 11s. 6d.	5 North Trelawny, £6¾.	40 Wheal Wrey, £1¾.
20 Devon Kapunda, £1¼.	100 North Hingston, 3s. 6d.	20 Wheal Treasury, £1.
20 East Tamar, 16s. 6d.	20 North Ding Dong, 10s.	10 Wheal Arthur, £33.
100 East Wh. Vor, 11s. 6d.	100 Penllyne Court, £1¾.	10 Wheal Uny, £11¼.
10 East Reeth, £¾.	100 Perran Wh. Alfred, £¾.	100 Worthing, 4s.
10 East Russell, £5½.	100 Penpompren, 4s. 6d.	100 Wood Mine, 4s.
160 East Balleswidden, £¾	100 Quintr. Downs, 9s. 6d.	10 Wheal Russell, £2½.
2 Great Alfred, £32.	50 South Yeoland, £1½.	30 Wh. Kitty (St. Agnes), £3¼.
50 Great Baddern, £1¾.	20 Sortridge Cons., £¾.	10 Wheal Zion, £3½.
10 Gilmar, £¾.	20 St. Austell Cons., £1¼.	5 Yeoland, £5.
10 Guskus, £1 13s. 6d.	5 Stray Park, 13s.	

And will BUY East Alfred and Wheal Sarah.

Every description of mining property bought and sold for the usual brokerage. (The price of East Tamar last marked incorrectly, it should have been 14s. 6d).
32, Nicholas-lane, Lombard-street. (Sworn Broker.)

MINING SHARES.—Mr. GEORGE SPRATLEY, has for SALE at the following prices:—

2 Boscean, £95.	20 Trewetha, £4¾.	20 Pendeen, £3¼.
50 Wheal Golden, 31s. 6d.	50 Tremollett Down, £¾.	200 West Wh. Arthur, £¾.
50 Devon Kapunda, £1¼.	50 Silver Brook, 32s.	100 Perran Wh. Alfred, £½.
10 Merilyn, £1½.	100 Worthing, 4s.	75 North British, £1½.
50 South Cork, £¾.	2 Eaglebrook, £50.	100 Trenault (lime), £¾.
20 Hennock.	25 East Tamar, £¾.	100 Lackamore, £¾.
5 Craddock Moor, £9½.	10 Marke Valley, £5½.	20 Tavy Consols, £3¾.
	500 Wheal Sarah, 1s. 6d.	

And will BUY Alfred Consols, Great Wheal Alfred, Tavy Consols, Cwm Darren, West Providence, South Tamar, Wh. Lemon, Wh. Zion, Marke Valley, West Basset, Mixon, Langford, Great Crinnis, Wheal Wrey, Pendeen, Wh. Exmouth and Adams, Wheal Tremayne, Mary Ann, Treviskey, Lackamore, Herodsfoot, Poltimore, Hingston, South Tamar.

Mr. SPRATLEY TRANSACTS BUSINESS in all British and Foreign Mines.
Dated Feb. 10, 1854, 2, Winchester-buildings, London.

MR. W. LEMON OLIVER, STOCK AND SHAREBROKER, 23, THREADNEEDLE STREET
Business transacted in every description of British and Foreign Mines. (Sworn Broker.)

MR. LELEAN, No. 76, KING WILLIAM STREET, CITY, TRANSACTS BUSINESS in HOME and FOREIGN MINES, INSURANCE, BANKING, RAILWAY, and other SHARES.

TO RAILWAY COMPANIES, CONTRACTORS, &c.—JAMES LAWRIE AND CO., COUSIN LANE, UPPER THAMES STREET, supply RAILWAY CHAIRS and SLEEPERS, FISHING PIECES, BOLTS and NUTS, SPIKES and TIE BARS, COLUMNS, GIRDERS, SOCKET PIPES, and all kinds of IRON CASTING. Also, HENDERSON'S PATENT DERRICK CRANES.

WILLIAM THOMPSON AND CO. (Established 1834), SPANISH CONSULATE, LEITH, GLASGOW, and TROON,—SHIPPERS of PIG-IRON, BAR-IRON, and COAL.

COBALT AND NICKEL.—ALFRED SENIOR MERRY, REFINER AND PURCHASER OF COBALT AND NICKEL ORES, AND ASSAYER IN GENERAL.—Address, LEE CRESCENT, BIRMINGHAM.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, MILL STREET, BROAD STREET, BIRMINGHAM.—STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL.	OXIDE OF COBALT.	[WIRE, &c.
REFINED METALLIC BISMUTH.	GERMAN SILVER—IN INGOTS, SHEET,	

NICKEL AND COBALT ORES PURCHASED.

IBBOTSON BROTHERS AND CO., SHEFFIELD, STEEL AND FILE WORKS; also COMMISSION MERCHANTS for the SALE and PURCHASE of every description of MACHINES and MACHINERY, and every article used by engineers, too numerous to enumerate in an advertisement.

MR. THOMAS EDINGTON, IRON MERCHANT AND CONTRACTOR, INSPECTOR of RAILWAY BARS and CASTINGS, No. 17, GORDON STREET, GLASGOW.

COUNTY GENERAL MINING OFFICES, LELANT, HAYLE, CORNWALL (AND AT PENZANCE, REDRUTH, AND TRURO).—J. HOLLOW has BUSINESS to do in Boscean, Mill Pool, East Margaret, Wheal Lemon, Gwallon, Pendeen, Great Wheal Fortune, Guskus, Treloweth, Wheal Reeth, Wheal Bal, Kenneggy, &c. A lot of Wheal Montagues for sale cheap. BUYER of Wheal Margarets, Balnoons, and West Abrahams.—Dated Feb. 10, 1854.

MINING OFFICES, ST. JUST, NEAR PENZANCE.—Mr. CARTHEW, MINING AGENT, ST. JUST, CORNWALL, having for many years a practical local knowledge of Cornish mines, is at all times in a position to ADVISE CAPITALISTS on MINING SHARES.
Mines inspected at the shortest notice.

MR. TYACK, MINE BROKER, CAMBORNE, from his situation in the best mining district in the county, together with his daily opportunities of increased experience, is well adapted to GIVE ADVICE to CAPITALISTS disposed to invest in MINING; considering the present time, a good and favourable opportunity to invest. Mines inspected by the most experienced agents.

MESSRS. HENWOOD AND CO., MINE AGENTS AND SURVEYORS, LEEDS, OFFER THEIR SERVICES to parties embarking in MINING, and are prepared to give advice on all the leading speculations of the day. Offices of the Pencorse Consols, Copper, Zinc, and Lead Mining Company, &c.
Telegraph-yard, Leeds.

MR. RICHARD HAWKE, MINE SHAREBROKER, LISKEARD, CORNWALL.

CROKER BROTHERS, STOCK AND SHAREBROKERS, PLYMOUTH.

MESSRS. HARRISON AND BRERETON, MINING BROKERS, 32, CASTLE STREET, LIVERPOOL.

MR. W. H. BRUMBY, STOCK AND SHAREBROKER 1, BRIDGE STREET, BATH.

MR. M. W. BEACHCROFT, MINING AGENT, 20, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON.

MR. E. GOMPERS, MINING SHARE DEALER, 98, GRACECHURCH STREET, LONDON.

SHARES WANTED.—Mr. H. B. RYE is a BUYER of the following, viz.:—

South Wh. Frances	Wheal Chiverton	Wheal Basset	Wheal Trefusis
Bryntail	Tresavean	Tavy Consols	South Caradon
Dolcoath	Gonamena	Leeds Town Consols	

77, Old Broad-street, London, Feb. 3, 1854.

MR. B. W. POULTON, No. 50, THREADNEEDLE STREET (Two Doors from the Stock Exchange), TRANSACTS BUSINESS in the BRITISH and FOREIGN FUNDS, MINES, RAILWAYS, and other SHARES. All commissions promptly attended to, and business transacted upon Stock Exchange principles. Cash advances made upon shares.

A FEW SHARES FOR SALE in the Newtonards, Alliance Californian, Anglo-Californian, and National Patent Steam Fuel Companies.

MR. JOSEPH WM. OLIVER, No. 75, OLD BROAD STREET, LONDON, DEALER IN BRITISH AND FOREIGN MINING SHARES, BANKING, AND INSURANCE SHARES.

Mr. OLIVER begs to call attention to the recent discoveries of GOLD in British mines, and especially to the very large yield of 8 ozs. 3 dwts. 8 grs. to the ton in Perran Wheal Jane; this mine has a 36 in. steam-engine at work, and paid for, as well as £850 cash in hand. A favourable opportunity now offers for the purchase of Dividend Mines, in consequence of the high price of metals.

WANTED,—Shares in the London Life Association, Wh. Kitty (St. Agnes), Prince Albert Consols, Perran Wheal Jane, Great Wheal Baddern. And is a SELLER of Boscean, South Towy, Tremollett Down, Hennock, Ritton Castle, Weston, East Halamanning, Tamar Maria, Crookhaven, Norbury, Perran Wheal Alfred, Treweatha, East Balleswidden United, West Providence.

NORTH WALES UNITED SLATE AND SLAB QUARRYING COMPANY.

LLANFROTHEN, MERIONETHSHIRE, AND BEDDGELERT, CARNARVONSHIRE, BETWEEN THE VALE OF FESTINIOG AND THE PORT OF TREMADOC.

On the "COST-BOOK PRINCIPLE."

Capital £60,000, in shares of £1 each. 10s. on each share to be paid on allotment. The residue as circumstances may demand; and it is confidently expected that not more than the first call will be required.

COMMITTEE OF MANAGEMENT.

H. A. DRAKE, Esq., 28, Gloucester-road, Regent's-park.
WALTER OXLEY, Esq., 2, Regent's Villas, Avenue-road, Regent's-park.
WILLIAM FECHNEY BLACK, Esq., 52, King William-st., City; and 15, Regent-st.
WILLIAM COOPER, Esq., M.D., Essex-street, Strand.
H. T. RYDE, Esq., Mecklenburgh House, Mecklenburgh-square.

SOLICITORS—Messrs. White and Cole, 28, Martin's-lane, Cannon-street.
ENGINEER—D. Lambert, Esq., C.E.
BANKERS—Messrs. Robarts, Curtis, and Co., Lombard-street; Messrs. Williams and Co., Carnarvon.
AGENTS—Australia ..... Messrs. A. Lambert and Son, Sydney, New South Wales.
Liverpool ..... Mr. G. C. Crofts, Columbia-buildings.
Kent and Sussex Mr. James Crundall, Dover.
PURSER AND SECRETARY—George Temple, Esq.

OFFICES,—5, WARNFORD COURT, THROGMORTON STREET.

Prospectuses, with reports and plans, to be had on application at the offices of the company, where also applications for shares must be addressed.

SITHNEY WHEAL BULLER TIN MINE,

NEAR HELSTON, CORNWALL.

(Adjoining the celebrated Great Wheal Vor, from which immense wealth has been obtained.)

There are a FEW SHARES FOR SALE in this very promising MINE, from which several rich parcels of tin have of late been sold. The mine is in full work, with all the machinery, newly erected, necessary for carrying on the operations thereof.

A prospectus of the present state of the mine, containing a detailed statement since its commencement, may be obtained gratis of Mr. Jas. Fairweather, the purser, at 6a. Belvedere-road, Lambeth, London.

SOUTH HERODSFOOT COPPER AND SILVER-LEAD MINE.

Divided into 10,000 shares, at £1 per share, to be paid on allotment.
Conducted on the "COST-BOOK PRINCIPLE."—Now in active operation.

TRUSTEES FOR THE COMPANY.

JAMES FORD, Esq., Shrubbery, Tottenham.
THOMAS HALL, Esq., Lingfield, Surrey.

RESIDENT AGENT—Capt. Joseph Matthews. | PURSER—Mr. Geo. Searby.

OFFICES,—19, BUCKLERSBURY.

This extensive and highly mineralised sett embraces upwards of 500 acres of land, in the parish of Talland, Cornwall, about one mile from the seaport of Polperro, where materials can be landed and ores shipped at a very small cost.

For many years, this sett was held by working miners, who, so confident of success, drove an adit about 40 fms. into the hill, on the eastern part of the sett; and commenced sinking a shaft near the great cross-course, with a view of communicating and intersecting the lodes mentioned in the annexed reports.

They also commenced working on the course of the lode, breaking quantities of copper ores, but, for want of means to procure the necessary machinery, allowed the ores to be scattered: a portion of which can be seen at the office, of the present company, who have purchased a lease for 21 years (renewable), at one-sixteenth dues.

The former holders have consented to take paid up shares of the company, as compensation for their outlay and labour.

The remaining shares are offered to the public as a lucrative investment.

It is deemed needless to give a lengthened prospectus: it being a well-known fact, that this sett embraces many peculiar advantages for developing its mineral resources: and having employed mining engineers of known respectability, who report favourably on the prospects of the undertaking, which is being prosecuted with spirit and economy. Samples of ores, and reports of practical mining agents—in addition to the annexed, may be seen, and every information obtained at the office of the company, 19, Bucklersbury.

Gunnis Lake, Oct. 26.—According to your request, I was on Friday last, at South Herodsfoot, in the parish of Talland. With reference to the reports given by Mr. Clark and Mr. J. W. Jenkins, of this mining sett, I find them to be perfectly correct. Moreover, by working a little on No. 2, lode, I find it to be two feet wider, and still more promising. I also discovered a cross-course to the south of No. 2 lode, not mentioned in the former reports—and from the present indications, believe it will prove productive in silver-lead ores. I need not enlarge upon the lodes already mentioned, but remark, doubtless, there are other lodes to be discovered in the sett. The set is large, and stands well for both import and export trade: sufficient water may be taken up at the eastern part of the sett to work all necessary machinery required to prove the mine. I would recommend you without delay to drive an adit level on the course of No. 2 lode, commencing at high water mark, and to sink a shaft in the hill on the same lode. I would here remark, this western hill is about 300 ft. high. Also costean on the back of the said hill, where there is, I am fully persuaded, rich mineral lodes passing through. JOSEPH MATTHEWS, Mining Agent.

FORM OF APPLICATION FOR SHARES.

To the Managing Committee of South Herodsfoot Copper and Silver-Lead Mine.

GENTLEMEN,—I request that you will allot to me shares in this mine; and I hereby agree to accept that or any less number, and to pay £1 per share at the time specified in your letter of allotment.

Dated this day of , 1853. Name .....
Reference ..... Address .....
Address ..... Profession .....

TRENOW CONSOLS COPPER AND TIN MINING COMPANY.

In 5000 shares of £2 each.

A call of 5s. per share, made on the 23d December, 1853, is payable forthwith and the remainder as and when required.

Now working on the "COST-BOOK PRINCIPLE."

COMMITTEE OF MANAGEMENT—Gentlemen of high standing in the West of Cornwall.
BANKERS—Messrs. Batten, Carne, and Carne, Penzance.
PURSER—Mr. Thomas Carthew.
Meetings to be held every Two Months.

OFFICES OF THE COMPANY, TO BE ON THE MINE.

These mines, in the parish of Perranuthnoe, Cornwall, are situated in one of the best mineral districts in the county, adjoining Wheal Neptune, Wheal Charlotte, Tregurtha, the well-known Marazion Mines, and Wheal Friendship—now about to resume working by a spirited company.

The directors, after an unusually rigid enquiry and careful inspection of these mines, have the greatest confidence in bringing them before the public, and they feel justified by established facts in asserting that a more promising and advantageous mining investment, and one more free from any speculative feature, has never been offered to the public.

The mines are at a short distance from the town of Marazion, and were formerly worked as three distinct undertakings—viz. 1. Trenow Consols and Wheal Pleasant; 2. Carn Perran; and 3. South Wheal Neptune. All were, in the hands of the late adventurers, most profitable so long as they were conducted in harmony together.

Trenow Consols worked several rich lodes close up to the boundary of Carn Perran, and realised therefrom (as well as from the works in Wheal Pleasant, which was in the hands of the same adventurers) a profit for a considerable period, varying from £500 to £800 per month, upon a capital embarked of about £5000 only. The shares (£20 each) consequently attained a premium from £170 to £200.

Carn Perran (which is between these two mines, and possesses the same lodes and strata), though less extensively worked, yielded for several successive years a similar rate of profit. The shares in this mine also obtained a very large premium.

The lodes in Trenow Consols which proved so abundantly rich down to the 75 fm. level, and which run through Carn Perran and Wheal Pleasant, have been only worked in the two latter mines to the respective depths of 40 fms. and 20 fms.

A reference to the section (which will be forwarded on application) will better illustrate their position.

It is moreover beyond question that these same lodes will, even at a far deeper level than 75 fms., prove richer and more productive in their downward course. This in fact has actually been the result in the Marazion Mines, which closely adjoin.

There can, therefore, be no doubt that these three mines are actually teeming with certain and abundant mineral wealth (believed from unfailing data to be practically inexhaustible), which the application of a moderate capital to the extension of existing works cannot fail very speedily to develope, even to a far greater extent than that realised by the former adventurers.

Although these mines formerly proved so profitable when worked in harmony, very serious dissensions arose amongst the adventurers. The engine of Carn Perran being insufficient, the water from that mine drained down into Trenow Consols and flooded the works, which were consequently suspended by the adventurers, who upon finally closing the undertaking obtained, in addition to enormous dividends previously received, a return of £25 for every £20 originally embarked. Upon Trenow engine being thus stopped she rapidly filled, and the Carn Perran adventurers, who were chiefly working men, and had depended upon the Trenow engine, not having sufficient capital to erect adequate machinery of their own, the three mines (being so closely connected) were all flooded together, and necessarily abandoned, as explained in the report of Capt. Gundry.

South Wheal Neptune, which nearly adjoins the other three mines, has been already worked with great profit, but only to an inconsiderable depth, by a few adventurers, of small capital, and proved to abound with mineral resources, and to be capable, when efficiently worked, of yielding amply remunerative returns.

These four mines are now consolidated under the general title of the Trenow Consols. They are held under a lease for twenty-one years, subject to the moderate royalty of one-eighteenth.

It is unnecessary to enter into further particulars in the prospectus, as the reports from well-known and highly respectable mining agents, the accuracy of which the directors have tested, fully bear out the sanguine views which they entertain.

This undertaking is, therefore, no mere speculation; it is not an invitation to take shares in a project for exploring land, however promising, with the sanguine hope of finding a mine; for, as already shown, these splendid mines are known to be most rich both in copper and tin, although, when worked separately and with jarring and discordant interests, they could not be worked to advantage. Now that they are all united, operations can be resumed with increased rapidity and success, and with greater economy, and the happiest results may by confidently anticipated.

Capt. John Carthew, who is of long standing and experience in mining operations, and of high respectability, affirms that if these mines be properly worked they will in the short space of six months after the erection of the engine be leaving profits.

The estimate of the outside cost of one steam-engine and boiler-house, with all necessary buildings, &c. &c., for the most efficient working of the mines, is under £6000. There will thus remain a surplus of £4000 for defraying the working expenses until returns shall be made sufficient for the purpose.

Applications for shares, sections, and rules, to be made to Mr. T. Carthew, Mining Offices, 12, Lafrowda-terrace, St. Just, near Penzance; or to Mr. T. W. Soady, mine broker, Penzance (who is appointed to dispose of shares).

Detailed prospectuses, containing elaborate reports from Captain John Carthew; Capt. Benjamin Gundry; Messrs. William Trembath (Spearne Consols) and Henry Michell (East Balleswidden); Richard Bryer, one of the underground miners; and a comprehensive report, forming a thorough examination into the general statements of the prospectus—all of which appeared in the *Mining Journal* of the 7th and 21st January—can be obtained on application as above, or at our office.

CARRACK-DEWS UNITED MINES,

IN THE PARISH OF ST. IVES, COUNTY CORNWALL.

Held on lease for 21 years, at 1-18th royalty.—In 12,000 shares of £1 each.
No Deed to be signed, being on the "COST-BOOK PRINCIPLE."

COMMITTEE OF MANAGEMENT.

BENJAMIN CLAPHAM, Esq., The Terrace, Old Kent-road.
CHARLES JNO. ELEY, Esq., Adam's-court, Old Broad-street.
WILLIAM GOOCH, Esq., 9, River-terrace, Islington.
JOSEPH WILLIAM HOLLAND, Esq., 73, Lamb's Conduit-street.
JOHN ROSCORLA, Esq., Penzance, Cornwall.
JOHN WOOLMER, Esq., 73, Aldersgate-street.

UNDERGROUND AGENT AT THE MINES—Capt. Martin Dunn.
BANKERS—Sir J. W. Lubbock, Bart., Forster, and Co., 11, Mansion House-street.

OFFICES,—4, ADAM'S COURT, OLD BROAD STREET.

These mines were worked by a party of poor men in 1810, and again in 1824, when, by means of hand labour, and without the aid of machinery, they raised a considerable quantity of copper, over a depth of less than six fms. from the surface. Workings were renewed by another party of poor men in 1837-38, when more copper was profitable raised by the same means, at a very little greater depth; but as the poverty of the then workers disabled them from purchasing the necessary machinery, the accumulation of water compelled them to desist from proceeding futher.

These setts are situate about half-a-mile to the west of the borough of St. Ives, and are bounded on the north and north-east by the Bristol Channel, having to the south the well-known Wheal Trenwith Mine, while immediately contiguous, on the south-west extremity, is the very rich St. Ives Consols Mine. Wheal Trenwith, during its former working, between 1828 and 1840, yielded upwards of £80,000 worth of mineral; and such is the opinion of its value, that it is now being set to work again. St. Ives Consols Mine has been yielding immense quantities of ore for the last 50 years, and is still paying dividends, upwards of £120,000 nett profit having already been divided.

The directors cannot within the limits of an advertisement give sufficient information to enable any one to judge of the progress already made, or the immediate objects in view. The prospectuses will afford some information on these matters; and as the committee desire the very fullest enquiry, they will give every facility for furthering it. And they wish to add, that as no money will be wasted, or any other means taken for giving the shares a momentary and fictitious market value, they do not desire applications from those who do not desire an investment.

At a general meeting of the adventurers, it was resolved that, by an issue of 7000 shares of £1 each, an additional capital of £7000 should be raised, for the purchase of the necessary machinery and the profitable development of the various lodes. Of this number of shares the present adventurers subscribed and paid for 1000, leaving a balance of 6000 to be issued.

The plan of the setts, rules and regulations of the cost-book, list of present adventurers, statement of work done up to the present time, original reports, and every information can be obtained at the offices of the company; where also prospectuses can be had, and specimens from several of the lodes seen.

Plans and prospectuses can likewise be had of the following, to whom also applications for shares can be made,—viz., W. T. Gooch, Esq., 3, Bartholomew-lane, Lothbury; Mr. James Hollow, Lelant, Cornwall; and Mr. E. S. Boyns, Penzance, Cornwall.

TAMAR MARIA MINE.—At a SPECIAL GENERAL MEETING

of shareholders, held in London, on Monday, 6th February, 1854, "To confirm or otherwise certain Resolutions passed at a Special General Meeting, held on the 16th of January last,"

SAMUEL WEATHERLEY, Esq., in the chair,

The minutes of the last meeting having been read and approved, it was—

Moved by Mr. Balcombe, seconded by Mr. E. B. Brown:—

That the five resolutions passed at the Special General Meeting, held at the George and Vulture on the 16th January last, and numered respectively 1, 3, 4, 5, and 6, be and are hereby confirmed.

Upon which the following amendment was moved by Mr. Joseph Matthews, seconded by Mr. Robt. Byron:—

That the said resolutions be not confirmed.

For the amendment ..... 2 | Against it 7

The chairman declared the amendment lost; after which the original motion was put and carried unanimously. SAML. WEATHERLEY, Chairman.

NOTE.—The present SCRIP CERTIFICATES are to be lodged at the offices FOR EXCHANGE, according to the resolutions this day confirmed.

19, Royal Exchange, Feb. 6, 1854. HENRY PERRY, pro Sec.

WHEAL MARY EMMA.—A MEETING of this company took

place on Saturday, the 4th inst., at their office, 17, Gracechurch-street,

Mr. S. H. ARMITAGE in the chair.

The minutes of the last meeting having been read, it was

Proposed by Robert Cole, Esq., seconded by William South, Esq.:—

That the same be confirmed.—Carried unanimously.

Proposed by John Owen, Esq., seconded by James Thompson, Esq.:—

That the sale do take place on Friday, the 17th inst., as advertised by Mr. F. Sadgrove.—Carried unanimously.

The thanks of the meeting was given to the chairman, as on a former occasion, for the interest he took on behalf of the adventurers.

BOTTLE HILL MINE.—At a GENERAL MEETING of the adventurers in this mine, held this 26th day of January, 1854,

ROBERT BARNETT, Esq., in the chair,

It was resolved unanimously:—

That the prospects of the mine being now so highly favourable, parties who hold scrip shares, not having either registered the shares, or paid the full amount of calls, should not be entitled to come in at any future time, and participate in the result of the capital, energy, and enterprise of those who have registered and paid; and that all holders of scrip shares in this adventure be required by advertisement to register their shares with the secretary, on or before the 28th February next; and that in default of such registration by the time aforesaid, no scripholder will be allowed to be, or become registered as a shareholder in this adventure.

By order of the General Meeting of Adventurers,

50, Threadneedle-street, Jan. 27, 1854 G. KIECKHOEFER, Sec.

BOTTLE HILL MINE.—To SCRIPHOLDERS IN THIS ADVENTURE.—ALL PERSONS

holding scrip shares in this mine are required to BRING IN their SCRIP to the secretary, at his office, as below, for registration; and are hereby informed that, from and after the 28th day of February next, no scripholder will be permitted to register any scrip shares in the above undertaking.

By order of the General Meeting of Adventurers,

50, Threadneedle-st., London, Jan. 27, 1854. G. KIECKHOEFER, Sec.

BOTTLE HILL MINE.—Notice is hereby given, that at a General

Meeting of Adventurers, held on the 26th January, 1854, a CALL of TEN SHILLINGS per share was made, PAYABLE to the Committee of Management, as below:—viz., 5s. on the 14th of February next, and 5s. on the 26th of February next.

By order of the General Meeting of Adventurers,

50, Threadneedle-st., London, Jan. 28, 1854. G. KIECKHOEFER, Sec.

TREBURGET CONSOLS MINING COMPANY.

In 25,000 shares of £1 each.

NOTICE.—The shareholders and public are hereby informed, that henceforth the ONLY LEGITIMATE SCRIP CERTIFICATES OF SHARES in this company are Those ISSUED at ONE POUND each, and bearing the penny stamp, being signed by two members of the Committee of Management, and countersigned by the secretary.

Offices, 9, Austinfriars, Dec., 1853. By order, J. HUNTER, Sec.

THE AUSTRALIAN FREEHOLD GOLD MINE.

Conducted upon the "COST-BOOK PRINCIPLE."

At the ADJOURNED BI-MONTHLY MEETING of the adventurers in this mine, held at the company's offices the 6th day of February, 1854, for the purpose of considering the report of the committee of management presented by them on the 7th ult.

The following resolutions were unanimously adopted:—

That it is inexpedient to send out machinery, or to continue the further prosecution of this adventure, until the committee receive a report from Wm. Dumaresq and J. R. Young, Esqrs., in pursuance of the power of attorney, and instructions sent on the 25th November last, authorising them to investigate the affairs of the company in Australia; and that, immediately on receipt of such report, a special meeting be called, to determine the course to be then adopted; and, in the meantime, the committee be requested to acertain the amount of the outstanding liabilities.

And that the committee of management be directed to prosecute the suit commenced against the vendors of the estate, to vacate the contract, and obtain a return of the purchase money and shares given to them.

And further, that a special committee of three shareholders be appointed, for assisting and aiding in the conduct of such legal proceedings, and to report thereon, from time to time, to the committee of management. By order,

WM. PULSFORD, Purser and Sec.

LAKE BATHURST COMPANY.—Mr. BAGSHAW requests the

scripholders in the above company, will have the goodness to MEET him at Two o'clock on Friday, the 17th inst., at this office.

21, Moorgate-street, Feb. 10, 1854.

LAKE BATHURST AUSTRALASIAN GOLD MINING COMPANY.—All persons

who have had shares allotted to them, and all others deriving their title through them as adventurers in this company, are hereby invited and requested to LEAVE their SCRIP with the secretary, at the company's offices, 27, Lawrence Pountney-lane, London, on or before the 18th day of February, 1854, to be examined, and, if correct, REGISTERED according to law and pursuant to the Cost-book Principle. And notice is hereby finally given, that all parties neglecting or refusing to leave such scrip within the time and for the purpose aforesaid, and have the same with their names and addresses duly entered in the cost-book as proprietors in this undertaking, shall not be considered or treated as proprietors, but shall be deemed to have abandoned all right, benefit, or interest in the said adventure, or in the funds or other property thereof, which shall thenceforth belong to, and be at the absolute disposal of, those shareholders only who shall have their shares, names, and addresses duly registered and entered as aforesaid, and shall sign the cost-book of the said company. And no further or other claimants will thereafter be permitted to have or claim any interest therein. The scrip, when duly registered as aforesaid, shall be stamped as evidence thereof, and signed by the secretary.

Feb. 4, 1854. By order of the Board, M. BLYTHE, Sec.

THE SOLVENCY MUTUAL GUARANTEE COMPANY.

London: 38, King William-street, London-bridge.
Manchester: 23, Brown-street.
Glasgow: 112, Fife-place.
Liverpool: The Old Hall, Old Hall-street.

Established for the Guarantees of Rents, Debts, Bills, Bonds, Compositions on Embarrassed Estates, and other Monetary Risks.

Creditors guaranteed against Loss by Bad Debts, assisted in the Recovery of Doubtful Debts, informed as to the Solvency of Buyers, and entirely relieved of trouble, expense, and loss of time in prosecuting claims under bankruptcies, insolvencies, and private arrangements.—Prospectuses, forms of proposal, and information, on application to CHARLES STUART CANSDELL, Resident Director.

GOLD AND SILVER ORE REDUCTION WORKS, RANELAGH

ROAD, THAMES BANK, PIMLICO.—G. BURSILL AND CO. invite the proprietors of mines to SEND to them for REDUCTION, by their PATENT PROCESS, SAMPLES of ORES that are assumed to be auriferous, and which should be in bulk, when convenient, of more than 2 cwts. (carriage paid), after which they will be prepared to enter into contracts for more extensive operations, either at their works as above, or by the erection of suitable machinery at the pit's mouth, and at their own cost, provided that a sufficient supply of gold-bearing mineral may be relied on. A charge will be made for reduction, but the ores will not be subjected indiscriminately, or without preparation, to one and the same process; as far as may be expedient, they will be tested, qualitatively and quantitatively, for gold and other products, in order that improved means may be applied for their reduction upon the large scale.

The patents secured by G. Bursill and Co. embrace efficient and continuous means for crushing and amalgamating, in addition to a method of disintegrating, by which pulverisation is vastly facilitated; they also include improvements in washing, separating, roasting, and smelting, and have reference to an extensive field of metallurgical operations in relation to gold, silver, copper, lead, antimony, and tin.

BERDAN'S GOLD MACHINE is CONSTANTLY in OPERATION

at the WINDSOR IRONWORKS, WINDSOR TERRACE, CITY ROAD, in TESTING GOLD ORES, for the satisfaction of mining companies; and a PUBLIC TRIAL TAKES PLACE every Wednesday, between the hours of Twelve and Three o'clock, for which cards may be obtained on application to MICHAEL NOURSE and CO., 17, Cornhill, London, the SOLE AGENTS of the patentee, who receive orders for the machines.

ORE CRUSHING.—CAUTION.—I hereby CAUTION all persons

MANUFACTURING, USING, and SENDING, without special license from me, MACHINES for the purpose of CRUSHING, PULVERIZING, and AMALGAMATING mineral and other substances, in which BALLS or SPHERES ARE USED IN CONNECTION WITH, OR MOVED BY, A REVOLVING PLATE OR PLATES, the same having been secured to me through, and in the name of, my agent, C. J. Wallis, under various modifications, by Her Majesty's Letters-Patent for England and the Colonies, dated June and December, 1852. Signed, J. W. COCHRAN.

PERKES'S PATENTED MACHINERY FOR THE REDUCTION

OF ORES, &c.—GOLD QUARTZ COMPANIES, MINING COMPANIES, and OTHERS, REQUIRING MACHINERY FOR WORKING AURIFEROUS AND OTHER ORES, are respectfully informed that the PATENTED MACHINERY, invented by the undersigned, will operate upon more quartz per day, and at a less cost of power, than any other machines hitherto made, and which he guarantees will by far supersede every description of revolving or stationary pans with one or more balls working within them, but which are also included in his patent; and that no one else has, or can have, a valid patent for such apparatus in this country; and NOTICE is HEREBY GIVEN, that PROCEEDINGS WILL BE ADOPTED FORTHWITH AGAINST ANY PARTY USING, or PURCHASING, SUCH MACHINES WITHOUT HIS LICENSE AND AUTHORITY; but if any party chooses to adopt such revolving pans with balls for their operations, he will be happy to supply them at a cost of not exceeding £450 each. SAMUEL PERKES, Engineer and Patentee.

1, Walbrook, City, Nov. 5, 1853.

GOLD MACHINERY.—ORDERS can NOW be RECEIVED to

any extent for PERKES'S PATENTED CONICAL ORE PULVERISING, WASHING, AND AMALGAMATING MACHINES; and also his PATENTED REVOLVING PANS AND BALLS, and whose machines have recently produced the most extraordinary results, beyond everything hitherto obtained from the same description of ores by any other machines yet invented.—Particulars can be had and certificates seen on application to S. Perkes, patentee, 1, Walbrook, London.

THE CHEAPEST AND MOST POWERFUL QUARTZ CRUSHER

yet invented is BAGGS'S STEAM STAMP, protected by a double patent. A small 4-horse engine will crush 30 tons of quartz or ore in 12 hours. The engine is complete in itself, and needs no separate steam-engine, or other motive power, to keep it in action.—To be seen every day at 53, Borough-road.

These stamping-engines are capable of CRUSHING BLOCKS A FOOT SQUARE.

THE CRUSHERS.—The attention of MINING COMPANIES is

directed to BAGGS'S PATENT STEAM STAMPS, for CRUSHING GOLD QUARTZ, and ORES of EVERY DESCRIPTION. These engines are now being generally adopted by mining companies, and they are found to effect an immense saving of time and labour, particularly in SPALLING, as with a small machine under this patent, blocks of the hardest rock, measuring UPWARDS OF A CUBIC FOOT are reduced in a few seconds. They are indispensable to the economical working of all the amalgamating machines now before the public.

Price of a Patent Steam Stamps, cylinder 8¼ inch diameter, £160, royalty included. This form of engine, which embodies all the latest improvements, is capable of crushing with ease from 20 to 30 tons of ore or quartz in 12 hours. To feed and attend it one man and two strong boys are sufficient. The pressure of steam employed is 40 lbs. to the inch. There is scarcely any wear and tear in these engines, though the blows struck are necessarily very powerful; and the total weight of the whole is under 5 tons.

TO ISHAM BAGGS, ESQ., LONDON.

DEAR SIR,—In reply to your letter of enquiry about the action of your Patent Stamping Machine, I beg to say, that I have now had it fully at work for two months; the quantity of coarse metal it will crush with ease is about 20 tons in 10 hours—about two-thirds is crushed fine, the remainder would require to be stamped a second time, to reduce it to the same fineness. The steam used is very little, and the crushing force very great; large lumps of the metal (which is very hard) are immediately broken down—when I say large, I mean lumps as big as ordinary paving stones. I am now putting up the second machine which you sent me, and have no doubt it will give (as the first has already done) entire satisfaction. I am quite convinced that the principle is excellent, and far superior to any other mode of crushing.

Spitty Copper Works, Llanelly. I am, yours, &c., ALFRED TRUEMAN.

All communications to be addressed to MR. ISHAM BAGGS, *Mining Journal* office, 26, Fleet-street; or to Mr. F. J. BRAMWELL, engineer, 29, New Bridge-street, Blackfriars, London.

SEVERAL OF BAGGS'S PATENT STEAM STAMPS (at prices

varying from £75 to £160) are NOW ON SALE, and READY FOR DELIVERY AT A DAY'S NOTICE. They effect an enormous saving of time and labour in spalling, cobbing, and crushing ores. These stamps, after the most careful inspection, have already been adopted by the following companies:—

THE ENGLISH AND AUSTRALIAN COPPER COMPANY.
THE ANGLO-CALIFORNIAN GOLD MINING COMPANY.
THE ALLIANCE GOLD MINING COMPANY.
THE ANGLO-AUSTRALIAN GOLD MINING COMPANY.
THE MEXICAN AND SOUTH-AMERICAN COMPANY.
THE ST. JOHN DEL REY (Gold, Brazil).
THE LINARES LEAD MINING ASSOCIATION (Spain).
THE LONDON AND CALIFORNIAN GOLD QUARTZ CRUSHING COMPANY.
THE ALMADEN MINING AND SMELTING COMPANY (Spain).
THE SAN FERNANDO LEAD MINING COMPANY (Carolina, Spain).
THE NEW LINARES LEAD MINING ASSOCIATION (Spain).

And they are about being adopted by several other companies and private individuals, who have carefully timed the results of their crushing powers, and submitted their capabilities to the most severe tests. In proof of the utility of these engines, it may be observed, that the saving in manual labour which they will effect to one company alone (the St. John del Rey) will amount to many thousand pounds sterling per annum. To be seen at all hours at the premises of Messrs. Burley and Bunn, engineers, 53, Borough-road.—All communications to be addressed, Mr. Isham Baggs, *Mining Journal* office, 26, Fleet-street; or to Mr. F. J. Bramwell, engineer, 29, New Bridge-street, Blackfriars, London.

IMPROVED STEAM HAMMERS.—Mr. ISHAM BAGGS is

now prepared to SUPPLY ironmasters, engineers, manufacturers, and miners, with STEAM HAMMERS and STAMPS of the most IMPROVED CONSTRUCTION, for forging and hammering iron and other metals, driving piles, and stamping and crushing gold quartz, metallic ores, and minerals of every description. By the introduction of a principle which he has recently patented, no less than FIFTY PER CENT. of the STEAM now used is SAVED, while the blow struck is very much harder, than in the engines now in use.

The NEW STEAM-STAMPS, for crushing ores, have been adopted by many of the leading companies, and they are now at work in various parts of North and South America, Australia, and England. They are eminently adapted for spalling, as well as crushing to fine powder, and they effect an enormous saving in superseding manual labour. A four-horse steam-stamp complete, with all the latest improvements, £160 (royalty included), for cash; a twenty-horse engine ditto, £650, and other sizes at proportionate rates. Contracts to any extent undertaken.

For further particulars, apply to Mr. Isham Baggs, *Mining Journal* office, No. 26, Fleet-street; or to Mr. F. J. Bramwell, engineer, No. 29, New Bridge-street, Blackfriars, London.

MINING.—Much MINING WEALTH remains UNEXPLORED

in consequence of the large capital necessary to try the real value of mining property. This object is now accomplished for a SMALL OUTLAY, without delay, by the HIRE of MEDWIN AND HALL'S PATENT PORTABLE STEAM-ENGINES, for pumping, winding, &c. These engines may be rented for any time required, of 10, 14, 20, or 30-horse power, and upwards; are strong, simple, mounted on broad waggon-wheels, horse-shafts to remove at pleasure, may be set to work without delay of fixing brick-work, chimney, &c. Several are ready for delivery, either at rental or purchase.—Apply to Messrs. Medwin and Hall, engineers, 92, Blackfriars-road. Some of the above engines are already employed in mining purposes.

RAILWAY COLLISIONS PREVENTED,—and other Inventions.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have an invention by which a railway train may be stopped, though the speed should be 100 miles per hour, within four yards, without injury to person or property. If there are a dozen trains within a quarter of a mile of each other, and one of them breaks down, by my invention the next train may be stopped, and the next, and so on indefinitely. The engine-driver has no occasion to throttle the steam off, as the invention is master of all the power belonging to an engine. In my opinion signals are of no use in these break downs. For instance, on a foggy night, when the sleet or snow is being blown into the eyes of the men working the train, it is not possible for them to see anything far from them; and if they had glass faces to look through, the snow would prevent them seeing a signal any great distance. By my invention the power is invested in those who have charge of the train, without trusting to signals, or to four or five different parties, each shifting the blame from one to the other. As useful as Major Robins's new break is, it has not the power to stop the next train, and the same may be said of Mr. Tyer's electric wire treadles. Supposing another train crossing the line, a train with my invention, although within eight yards of the crossing one, may be stopped without running into it. This invention is not the same as detailed in your Journal last summer, and it may be applied wholly or in part.

My plans for preventing shipping running on rocks, or against one another, is admitted by all who have seen it to be a complete invention. I have also a floating anchor to act with it.

In next week's Journal I will give a detailed account of the cause of boilers bursting.

To prove that these inventions will do all that I state, I will fit them in a sound, workmanlike manner for any railway or shipping company in the world, at a fair remuneration. JOHN HIAM.

12, Foundry-lane, Leicester, Feb. 6, 1854.

Original Correspondence.

PREVENTION OF SMOKE AND ECONOMY OF FUEL PRACTICALLY PROVED.

Sir,—As a thousand theoretical opinions, however conscientiously formed, and as many obtrusive assertions added to them, weigh but lightly against one duly authenticated fact, and as your readers must be more interested in unexaggerated results than in the cleverest controversial quibbles, I hope to be obliged by insertion in the *Mining Journal* of a few proofs, out of many, of my successful efforts within the limits of the metropolis, extracted from an Official Report, made by a practical and scientific gentleman of some standing and reputation. Further evidence to the same effect will be found in your advertising columns, in continuation of similar weekly records (already extended to many months), and not unworthy of perusal.

Mr. Henry Dircks strives, vainly, to provoke my assistance in the attainment of his wish to be once again treated as a trustworthy reasoner. He had better attend to his clients with 500*l.* or 1000*l.* to advance on eligible patent investments, and to those expectant inventors who are so excited by such piquant advertisements in the daily papers. Of him I can scarcely say other than the Scotchman did, when he captured and executed one of the little sanguinary vagrants that had been assailing him, "Let *that* flea stick to the wa'."

J. Lee Stevens.

1, *Fish-street-hill, City, Feb.* 6.

Darlington-works, Southwark-bridge-road, Feb. 6, 1854.

Dear Sir,—Learning that no objection exists at the Board of Health to my so doing, I have much pleasure in complying with your wish to be furnished with an extract from my report to Dr. Gavin Milroy, at whose request I entered into a personal examination of the practicability of smoke prevention, a few weeks since, and through whom the results have been officially communicated to the Board. I have no doubt, as you inform me, that I might have extended my enquiries to a much greater number of your "Patent Smokeless Furnaces" in the metropolis; but my object was not to ascertain *how much*, but whether *enough* had been done to establish the fact that, by simple and comparatively inexpensive means, the consumption of smoke could be effected in furnaces of various sizes and adaptations, without any extra cost in respect of fuel. By *your plan* I am happy to find, superadded to the legislative requirements for suppressing the smoke nuisance *so completely met, a very material saving is caused in the expense of coals*, both as regards reduced quantity and the economical substitution of cheaper for dearer qualities; or by a corresponding *increase of steam power* with the same supply of fuel as before. And the best evidence I can give of my entire approval of your invention is, that I have determined to adopt it, forthwith at the Darlington Works.

Yours very truly,

J. J. Stevens (of the firm of Stevens and Son).

To John Lee Stevens, Esq., 1, Fish-street-hill, City.

EXTRACT OF REPORT TO THE BOARD OF HEALTH,

BY MR. J. J. STEVENS, ASSOC. I.C.E.

"The patent of Mr. John Lee Stevens (who I should observe is no relative of mine), appears to meet the case in a manner that is more in accordance with the opinions I have entertained than any other I have seen; in so much as it is extremely simple in its details, is consequently inexpensive as regards the first cost, requires no motive power to work it as in the case of Juckes's plan, also of Hazeldine's, and Samuel Hall's; and hence it is applicable to every description of furnace, and even to bakers' ovens.

"The operation is as follows:—At the far end of the furnace is placed a supplementary bearing bar, under which, at a few inches from the upper fire bars is a small grating, upon which a portion of incandescent fuel falls from the furnace beyond the supplemental bearing bar; and at the end of the furnace there is an opening in which is placed two plates, protruding into the furnace, with an opening between them for the admission of air. The oxygen of the atmosphere passing through the ash-pit, over the grid plate, and between the two caloric plates, becomes heated, and in that state comes into contact with the gasses passing off from the body of the furnace, and so combining with the carburetted hydrogen, ignition is produced, and the flame carried along the flues in place of the black smoke.

"To convey my observations to you more fully I send you a copy of my notes as taken at several of the manufactories I have visited, viz.:—

Mr. J. C. PrellER, patent leather manufactory, Lant-street, Borough.

"Boiler 12 ft. × 4 ft., with internal flue; coals used, Midland and Newcastle; consumption, 2½ tons per week.

"I had the furnace charged with coals in the usual way, and observed the top of chimney; saw brown semi-opaque smoke during the time the furnace door was open. As soon as the door was closed the brown smoke immediately became transparent. I then had the coals raked up, and a further supply thrown on, but found the stoker could not produce black opaque smoke.

"The engineer stated that the saving in coals, the additional work now performed by the engine considered, was about one third; that they were compelled, with the old furnace to resort to Welsh coals (anthracite), as the volume of black smoke with Midland or Newcastle coals then caused great complaints in the neighbourhood; and that the cost of Welsh coals compared with the Midland, and considering the saving above referred to, between the old and new furnaces with Midland coals, made an advantage to the proprietor of more than 40 per cent.

Messrs. Easton and Amos, engineers, Grove-street, Guildford-st., Southwark.

"Boiler 18 ft. × 6 ft. with J. Lee Stevens's furnace, and boiler 14 ft. × 5 ft. Juckes's furnace; consumption of coals, nothing but slack being used, about 2½ tons per day; the flues of the two furnaces conducted into one shaft; and the first-mentioned furnace fed with coals about six times per hour.

"Brown semi-opaque smoke emitted 1½ minutes after coaling; light brown, nearly transparent for another minute; and afterwards only a thin vapour, slightly tinged, not so much as from an ordinary house fire. With Juckes's patent the fire has to be drawn back about twice in each hour, during which time semi-opaque smoke is emitted for two minutes. The working of these two plans in juxta-position is very satisfactory as regards the merits of each of them. The stoker states that he gets up the steam to the required pressure with much greater facilities since he has had Mr. Lee Stevens's arrangement of furnace. Before its introduction dense black smoke was emitted from the chimney for 40 minutes out of every 60."

Mr. Sisterson, engineer, Bridge-street, Southwark.

"A very small boiler and furnace. Boiler 6 ft. 6 in. × 3 ft. 9 in.; consumption 2 cwts. per day. When Mr. Lee Stevens's smoke-consuming apparatus was applied, the furnace was contracted, and the saving of coals is one third: formerly the dense black smoke was very much complained of; but since the adoption of the new plan there is no cause for complaints; and the fireman stated that they got up steam with greater facility, and that, combined with the saving in coals, would render a return to the old principle a loss to them."

Messrs. Keens and Welch, Mustard Mills, Garlick-hill, City.

"Having complaints from their neighbours of the volumes of black smoke emitted from the engine-chimney, and having been served with a notice from the authorities of the City to abate the nuisance, they had adopted Mr. Lee Stevens's furnaces.

"Boiler 13 ft. × 5 ft. 6 in.; saving of fuel 1-12th, the fire surface unusually large. Had previously an ordinary furnace, charged four times per hour; dense black smoke emitted for 10 minutes after firing, 40 minutes per hour. With the new plan, charge four times per hour; brown semi-opaque smoke emitted 1½ minutes, or 6 minutes per hour. The engineer states that he has had less difficulty in getting up the steam; and that he has recommended the proprietors to have the furnace of the second boiler altered so to consume the smoke; and that it would be a loss to them to return to the old plan."

At another of Messrs. Keens and Welch, Trinity-lane, City,

"The stoker reported the saving of fuel was one-fifth, and that with this smoke-consuming apparatus he can get up the steam in less time than before. There was no smoke perceptible from the top of the chimney, except when the furnace-door was open, and then not black, but brown semi-opaque. Previous to the adoption of Mr. Lee Stevens's apparatus there were great complaints in the neighbourhood of the smoke from this chimney."

Messrs. Miller, Ravenhill, and Salkeld, engineers and marine steam-engine manufacturers, Glasshouse-field, Stepney.

"Boiler 11 ft. × 4 ft.; consumption of coals 8¾ cwts. in 12 hours. With old furnace they charged every 10 minutes, which gave thick black smoke for five minutes, and then brown smoke for the remaining five minutes. With Mr. Lee Stevens's plan, charged the furnace every quarter of an hour, the smoke being without colour as soon as the furnace-door was closed. The result of a continuous use of the invention, as regards consumption of coal, was—Old plan, 3½ tons, consumed in 7 days 2 hours; new plan, 3⅛ tons, consumed in 8 days 5½ hours; estimated saving about a sixth.

"As this eminent firm had been mainly desirous of testing the value of Mr. Lee Stevens's invention as regards the saving of fuel, they gave me the opportunity of trying an experiment in reference to the consumption of smoke, which was as follows:

"The hot-air passage at the end of the ash-pit, and through which the air is admitted into the back of the furnace, between the caloric plates before described, I had stopped with clay; by which means the furnace was temporarily restored to the ordinary or old plan, the result of which was the production of a large volume of thick black smoke, nearly continuous; but on the removal of the clay the black smoke immediately subsided, and the vapour exuding from the chimney was scarcely perceptible, the beneficial action of the invention being instantly restored. This experiment was very interesting and satisfactory, as it exemplified at once the facility with which the smoke may be consumed.

"Mr. Salkeld, one of the firm, stated that he would not be disposed to return to the old plan of furnaces, but that he would, in setting new boilers, be disposed to adopt smoke-consuming apparatus; and from the experiments that had been tried on the premises, he would give the preference to the plan of Mr. Lee Stevens, which he has then having applied to another boiler."

"I have visited several other establishments, but the results are so similar to the above in general statistics that only one other need be mentioned, that of—

Mr. W. R. Shaw, leather manufacturer, Wyld's-rents, Bermondsey.

"At this place I found they consume such refuse as tan, leather shavings and cuttings, &c., with about one-fourth of coal. The smoke arising from such fuel was not only dense, but the odour was extremely disagreeable when burnt on the old plan of furnace; but by the adoption of the smoke-consuming apparatus of Mr. Lee Stevens the opacity of the smoke was removed, and the smell also—the gases being more perfectly converted to the production of heat."

P.S.—I have purposely omitted such portions of the report as, being less advantageous to some of my competitors, I do not think it behoves me to publish. To have read them would be to weaken *our general claim on public attention*; and hence I must be attacked myself with more than common unfairness, before I can be induced to place any other inventor under unfriendly examination.

Permit me to add, that some of your correspondents, who lay very considerable stress on the necessity of using *mechanical* movements for regulating the supply of air to the furnace, appear to have overlooked your observations of the 14th May, 1853, on that part of the question with reference to a peculiar property of my invention. After describing my plan, you went on very justly to say—"These trifling mechanical details, however, are of little consequence, compared with the important fact elicited by every application of the invention that has been made—viz., that the quantity of oxygen supplied by the current of air is regulated by the actual demand—that is, in due proportion with the intensity of combustion. The fiercer the fire, and the greater the requirements of oxygen consequent thereon, the more rapid the velocity at which the current of air rushes into the furnace, so that a self-acting regulator is thus produced by an immutable law of Nature; and the necessity for any objectionable apparatus, always dependent upon the uncertain attention of the fireman, is thus effectually annulated." How much that opinion, then so clearly expressed by you, has been confirmed by subsequent experiences, already laid before your readers, I leave them to judge; and it will be time enough for them to abandon a particle of their confidence when, by a similar aggregate of practical proofs, it is as decidedly demonstrated that equally good results can be obtained by mechanical contrivances, whether relying upon, or independent of, manual attention.

J. Lee Stevens.

COMBUSTION OF COAL—PREVENTION OF SMOKE.

Sir,—The question of perfect combustion, with its necessary consequence—the prevention of smoke—is one which is at present exciting so much public attention, that the following analysis of the subject, extracted from my Treatise on Economy of Fuel, will be generally acceptable to your readers:—

"The great cardinal point in economy of furnace management—viz., the exact apportionment of the supply of air to the wants of the fuel, so as to convert all its carbon into carbonic acid, and all its hydrogen into water, could be achieved with comparative ease, were the same conditions always present in the interior of the furnace, so as to cause the quantity of air required by the fuel to be uniform.

"In this case the average rarefaction in the stack being once obtained, a steady supply would enter the furnace, according to the area of the grate bar openings, the size of which once adjusted, the equable and economic working of the furnace would be secured. Unfortunately, however, the reverse is the case, and the great practical difficulty to be overcome in apportioning the supply of air to the demands of the fuel arises from the fact, that in furnaces of the ordinary construction, this demand is not only variable, but fluctuates within very wide limits.

"Where a fresh supply of coal is put on a briskly burning fire, the first thing which takes place is that the coal softens and swells, attended with the evolution of a large quantity of carburetted hydrogen gas, requiring for its combustion a correspondingly large supply* of atmospheric air—the coal undergoing, in fact, in the first stage of combustion just the same process as it does in the retort in the manufacture of gas, but with this difference in the result—that the gas which in the latter case is found so valuable a commodity, here escapes unconsumed up the chimney, not only furnishing no heat itself, but abstracting from the heat arising from the combustion of the carbonaceous portion of the fuel, the heat for its own gasification, a circumstance which readily explains the fact, that more heat is practically obtained in many kinds of furnaces from coke (or, in other words, coal deprived of 1-3d part by weight of that portion of its combustible matter which is richest in furnishing material for heat), than from coal in its pure state, with all its hydrogenous portion intact. From the same cause also—viz., the imperfection of our furnaces—the commercial value of coal is often in the inverse ratio to the quantity of its bituminous constituents and its real heat-giving powers, had we the capacity to render them practically available. It could not, in fact, be otherwise. A furnace immediately after a fresh supply of fuel, requires more than double the quantity of air it did the instant before, whilst we have no contrivance for furnishing such a supply, although without it, throughout the space of time during which rapid gasification of the hydrogenous portion is going on, more than half the fuel consumed is wasted and passes off unburnt, becoming thereby not only totally unproductive in itself, but absolutely an agent of evil, by robbing the furnace of the heat absorbed in its own volatilisation.

"Whether it be from an inadequate appreciation of the magnitude of the evil, or from the difficulties attendant upon overcoming it, I will not determine, but certain it is that 99 furnaces out of 100 are worked without any attempt being made at a remedy. Large quantities of coals are thrown upon brightly glowing cinders, the heat from which they absorb; a rapid evolution of gas takes place, which passing off unburnt at a comparatively low temperature, most injuriously cools down the heat of the furnace and flues, and by lessening the amount of rarefaction in the stack, enfeebles the draught, and thus still further diminishes the already insufficient supply of air, and reproduces the original evil in an aggravated form. In furnaces so managed, for the first two or three minutes after coaling the useful effect of the furnace is comparatively paralysed, and the process in which it is employed, partially suspended; and it is only gradually that it regains its full vigour of action.

"Only two methods present themselves by which the supply of air and the wants of the furnace can be made to correspond—either both of them must be made constant and uniform, or the fluctuations of one must be made to coincide with those of the other. If a continuous and uniform supply of air is to be furnished to a furnace, then, in order that this supply of air may exactly correspond with its requirements, the supply of fuel must be made continuous and uniform also, so that at all times there shall be just the same quantity of fuel in the same state—that is to say, at the same stage of combustion. This appears to be the most perfect method of working a furnace, and the most obvious mode of overcoming the difficulty, and it is accordingly to accomplish this object, that most of the attempts to prevent smoke and attain perfect combustion have been hitherto directed. Brunton's revolving grate, Juckes's endless chain of fire-bars, and more than one kind of rotating feeder, all fulfil with tolerable efficiency the purposes for which they were designed: but the great drawback is that unfortunately all require machinery and motive-power constantly at work to keep them in action; whilst some are, in addition, unhandy, and others expensive both to construct and keep in repair.

"The result of none being free from these objectionable qualities is, that none have been able to force their way into use to any extent; 99 furnaces out of 100 at the present moment, being fired by the rough-and-ready method of throwing the coals on by hand, without any contrivance being resorted to to mitigate the evils resulting from the inadequacy of the supply of air to the wants of the fire at the periods of coaling.

"Fully recognising the force of those objections to the present contrivances which have prevented their coming into use, and impressed with the belief that no plan of the sort will ever force its way that does not come recommended by much greater simplicity; in seeking a remedy for existing evils, it has been my aim to adapt myself to present usages, and devise some method by which the supply of air and the wants of the fuel may be mutually adjusted, without either serious innovation on established arrangements, demand for motive-power, or costly apparatus.

"The contrivance by which, without infringing either of these conditions, I propose to achieve the great desideratum sought, effects its object by admitting an increased supply of air at the periods of coaling, thus acting on the principle of causing the fluctuations of the supply and demand to coincide, without undertaking the more formidable, and I think, superfluous task, of adjusting the one to the other, by making both uniform and unvarying—a fact hitherto only accomplished at the sacrifice of simplicity. Whatever opinions may be entertained as to the general merits of my contrivance, it is, I think, impossible to deny that it has the recommendation of great simplicity, and presents in this particular a striking contrast to those at present before the public. All the existing arrangements for coaling remain undisturbed. The stoker when he closes the furnace door after firing, will raise the arm of a lever appended to it; this movement throws wide open a valve in the face of the door, which immediately commences closing slowly and automatically by the gravity of the lever, regulated and restrained by appropriate mechanism; and affords during the progress of its descent a gradually diminishing supply of air to the fire, in harmony with the gradually diminishing requirements of the fuel. The area of the valve, and the period of time throughout which the act of closing is to be prolonged, are, of course, questions of detail to be determined by circumstances, and should be so adjusted according to the nature of the coal, and the average quantity to be supplied at one time, as entirely to prevent the appearance of smoke. The door of the furnace should be double, and the air should pass into the furnace through a series of perforations in the inner plate. By this arrangement three important results are secured—1. The heating of the air.—2. Its sub-division into minute jets.—3. The keeping of the outer surface of the furnace door comparatively cool, and thereby both economising heat and preventing its radiation outwardly, to the annoyance of the attendants.

"An attempt is often made by careful stokers to mitigate the smoke and imperfect combustion arising from the inadequacy of the supply of air to the wants of the fuel at the periods of coaling, by leaving the furnace door ajar for a certain period after the addition of fresh fuel. The great superiority of a valve self-closing, and presenting a gradually diminishing aperture, over such an imperfect expedient, is too obvious to be contested. Not only does the air in the former plan enter *en masse* and cold, instead of in small streams and hot, but the means of gradually and regularly lessening the supply, according as the gasification of the bituminous portion of the fuel becomes completed, is totally wanting; whilst, should the closing of the door be forgotten, and delayed till after the completion of gasification, more harm will probably be done by the air entering during the latter portion of the time than the amount of good achieved by the portion which entered previously. In short, one method requires superintendence to effect imperfectly what the other accomplishes much better without any, and both superiority of effect and easiness of application are found united in favour of the method of adjusting the supply of air by means of an automatically closing valve."—*Jan.* 24.

One Interested.

* One measure of carburetted hydrogen or coal gas requires for its perfect combustion 10 measures of air.

MR. PRIDEAUX IN REPLY TO MR. C. W. WILLIAMS.

Sir,—In my first letter I said "Mr. Williams advises that the air be admitted cold; I strenuously insist upon its being heated: Mr. Williams advises it to be admitted behind the bridge; I recommend its introduction at the mouth of the furnace. Mr. Williams provides no means for gradually diminishing the supply of air as the gasification of the fuel advances; I condemn all schemes for admitting a uniform supply of air above the fuel as radically unsound in principle, and injurious in practice." The above language appears to me the reverse of equivocal, yet, strange to say, Mr. Williams replies by saying—"I feel it as a duty to ask Mr. Prideaux for some explanation as to what are the 'schemes' with which he associates my name, and which he considers 'faulty and erroneous.'" Now, the thing which really stands most in need of explanation is not my language, but why Mr. Williams does not choose to understand what I have so explicitly stated.

I am, however, so desirous that the public may learn to understand this (by no means recondite) question of smoke prevention, and thus be able to form some judgment for themselves, instead of being led astray by the *ipse dixit* of individuals, who have no other qualification for assuming the task of enlightening them but unmeasured assurance, that I will, in a few words, endeavour to give such a practical illustration as shall be intelligible to the meanest capacity, of why "I condemn all schemes for admitting a uniform supply of air above the fuel, as radically unsound in principle and injurious in practice."

Supposing a fresh supply of coal to be put on a furnace every 16 minutes, the smoke consequent upon coaling to come gradually to an end at the expiration of eight minutes, and that immediately after coaling the furnace requires at the rate of 100 measures of air per minute (admitted above the fuel), to furnish the requisite amount of oxygen to prevent smoke.

For such a furnace as the above my valve is adjusted, so as to furnish at the rate of 100 measures of air per minute when wide open; and to (gradually) close at the end of eight minutes. Now, as the operation of closing occupies eight minutes, at four minutes after coaling the valve is half shut, consequently admitting at the rate of only 50 measures of air per minute, and the whole amount of air admitted in the eight minutes during which the valve is open will be 400 measures; and this quantity, supplied in a gradually diminishing manner, in harmony with the gradually diminishing requirements of the fuel, is found sufficient to prevent all smoke.

Now, let us contrast with the result just described what takes place when smoke is prevented, by admitting air above the fuel, through an orifice of fixed size. To obviate smoke this orifice must be large enough to admit at the rate of 100 measures of air per minute (because this quantity is required immediately after coaling); consequently, in each period of 16 minutes there passes into the furnace 1600 measures of air, or four times the necessary quantity. The 1200 superfluous measures of air, which do not enter into chemical combination, contributing nothing to the generation of heat, but passing up the chimney at a temperature of about 500° higher than that at which they entered the furnace, which they rob of heat to this extent; thus being productive of unmixed evil, and neutralising the beneficial effect produced by the 400 measures of air really demanded for the wants of the furnace.

After this explanation, the public will be at no loss to understand why the beneficial effects, in an economical point of view, of such a mode of obviating smoke should be *nil*, as is found by experience to be the case. In fact, since the requirements of the fuel vary with the time elapsed after coaling, it really requires no argument to show that a plan of admitting air which accommodates itself to these variations must be superior to one that does not.

If Mr. Williams will impugn the correctness of any of the positions laid down in my work, I am perfectly ready to defend them by facts and argument, but not to refer them for decision to the supposed "highest chemical authorities," on whose approbation Mr. Williams lays so much stress. Were my book, like most other rudimentary treatises, a new abridgement or compilation from some larger standard work, such a test would be fair and appropriate: but seeing that it is, on the contrary, the result of original observation and research, that several important points regarding economy of fuel are here discussed for the first time, whilst on other points I have been led to form conclusions directly opposed to those held by all previous writers, Mr. Williams, who has read my Treatise, must be himself aware that authority is not the proper touchstone to which to refer it. Ever since I have been acquainted with the iron trade I have heard it stated, as a sort of self-evident fact, admitting of no dispute, that the temperature of the hot-blast furnace was higher than that of the cold-blast furnace, and that this was probably the cause of the inferior quality of hot-blast iron. Now, I have adduced arguments which will one day, I feel persuaded, be generally assented to, to prove that a higher temperature is attained in cold-blast furnace than in hot; again, with regard to the amount of duty performed by the fuel in blast furnaces, the matter was for many years considered to be finally decided by the report of Prof. Bunsen and Dr. Lyon Playfair, published in the annual volume of the British Association for the year 1845; but whereas this report states the duty performed to be only 17 per cent., I have shown by arguments, which cannot be overturned, that it amounts to more than 50 per cent., all authorities to the contrary notwithstanding. After these observations, Mr. Williams will readily comprehend that his statement, that the principles he advocates, "have received the unqualified and published professional approbation of the highest chemical authorities," weighs but little with me. In fact, it is evident, from the very nature of things, that every writer who rectifies a previously universal error must have all preceding authorities against him.—*Garden-road, St. Johns Wood, Feb.* 1.

T. Symes Prideaux.

MR. PRIDEAUX AND MR. C. W. WILLIAMS.

"He who filches from me my good name," &c.

Sir,—Mr. Prideaux is now taking credit for a mode of effecting the combustion of the coal gas in furnaces, by which the generation of smoke is prevented. This, however, appears to be a direct imitation of my formerly patented Argand furnace, and which is based on the principle laid down in my Treatise on the *Combustion of Coal*—namely, the introduction of air to the gas by small jets issuing from numerous orifices. This identity having been alluded to by Mr. Dircks, Mr. Prideaux, in the most unwarrantable and offensive manner, stated in your Journal of the 21st ult., that he considered it a duty he owed to the public to caution them against what he called my "schemes." On the 28th I asked for an explanation of so extraordinary a proceeding. Mr. Prideaux has, however, hitherto taken no notice of my demand. Fearing there may have been some justifiable cause for delay on his part, I beg again to ask,—What are the schemes with which he so offensively associates my name, and which he considers unworthy of being countenanced either by precept or example?

Mr. Prideaux, I now learn, admits his having been prepossessed against me by the statements of another. To whatever extent that may extenuate a personal attack, it can furnish no justifiable ground for one professed scientific writer, on a subject of great public interest, thus to malign and almost libel the scientific character and work of another. From present appearances, it would seem that Mr. Prideaux seeks, under false pretences, to cover his own direct imitation or piracy of my invention, and the mode of applying chemical principles to practice; and which, on the authority of the leading chemists of the age, were first promulgated by me.

Mr. Prideaux, with a very dignified bearing, says, "I feel it to be a duty which I owe the public, to prevent any one being led by my silence into the belief that I countenanced the schemes of Mr. Charles Wye Williams, either by precept or example." Yet, at the same moment, he was, both by precept and example, but unacknowledged, adopting these so discountenanced schemes. However I may value the loss of the countenance of Mr. Prideaux, I, nevertheless, do estimate too highly the favourable opinion my work has hitherto obtained from the highest authorities, to allow it to be filched from me by one who, whatever may be his own merits, has no right to misrepresent or depreciate those of another.

C. W. Williams.

Liverpool, Feb. 7.

INTER-OCEANIC SHIP CANAL.

Sir,—A friend of mine has kindly sent me over here your sensible and practical remarks of the 14 inst., upon the present scheme of cutting a tidal canal from the Atlantic to the Pacific, through the Darien portion of the Isthmus. It appears to me a most fortunate circumstance for the great project of an oceanic ship canal that your paper, combining that of a scientific with a practical character, has taken up the subject, for we may now hope to prevent great waste of money, which any attempt to cut the canal as now proposed will infallibly cause.

The great aim of all interested in such affairs ought to be to induce careful circumspection, accurate comparative surveys, and the avoiding of any false step at first, which inevitably would retard all good. I have, during the years 1850, 1851, and 1852, given much attention to the subject of an Isthmus canal. The topic has been canvassed frequently at the meetings of the Geographical Society, and also by the geographers of Paris and Madrid, and, in fact, the best surveys of the Isthmus are still some old Spanish ones, made long ago, and with great care, by the authorities of Puerto Bello. The American surveys are also very good for all practical purposes. They were made chiefly with a view to forming the railway now nearly finished, and an interesting summary of them and of Garella's trigonometric sketches are to be found in a book which is in the Royal Geographical Society's library, and which book was presented by the late American Minister, Mr. Everett: it is a sort of American Congress blue book.

Being scientifically interested in hoping to see a ship canal cut through the Isthmus of Panama, I have in consequence endeavoured to inform myself on all points connected with those surveys; and I cannot help expressing my wonder and regret that the present scheme of forming the canal in Darien should ever have been thought of! I cannot understand what could possibly have induced Dr. Cullen and Mr. Gisborne to hold so blindly to this locality: it is incomprehensible to me. Every one who has looked into the matter knows that the great *original* Darien expedition of 1699, which wasted 400,000*l.* of paid-up capital, was a well-designed scheme in all points *saving one*—viz., the choice of their Atlantic terminus, Port Escoces, and the selection of the Darien end of the Isthmus. It was the most valueless part of the Isthmus, the most difficult to approach from the Pacific, and the most difficult to get an offing from on this side.

I must, of course, suppose that Dr. Cullen and Mr. Gisborne will *now* see their error—that is, if they make a *comparative* survey. But it still seems a mystery to me why they should direct their steps first to Darien, and publish their intentions with such a flourish of trumpets, when every scientific man in Europe is trembling lest they break ground there, fail in their work, and disgust Europe and European Governments with the idea, which may again put it off for another hundred years.

Alexander von Humboldt has, it is said, approved of their scheme; but with due respect to that illustrious veteran, the wonderful patriarch of scientific travel, I cannot accept his approval, based on apocryphal statements. I have had correspondence with Alexander von Humboldt on the general subject of the Andes chain near the Isthmus, and on several occasions have conversed on that subject with him. I remember hearing him often speak of the small canal at Raspadura, at the sources of the Atrato. But I do not think Humboldt knows personally the route between Puerto Escoces and the Gulf of San Miguel. I hear that Mr. Gisborne thinks of availing himself for his tidal canal of the Rio Chunquanaqua, the great river which has several Indian names, and empties itself into the Gulf of San Miguel. Now, this river is, in the rainy season, a fearful deluge of a torrent; in the dry months a wide shallow stream, full of shifting sand beds, which said beds it carries far out in the Gulf of San Miguel. Humboldt told me that the plan of a tidal canal delighted him, from its "superb grandeur!" I quote his own words, but I told him my opinion was, as it still is, that any tidal canal would in four hours be a mere receptacle for mud and sand from the Pacific, however carefully made, and at whatever expense. I do not believe that a canal *without locks* will ever be cut through the Isthmus of Darien, or Panama.

Any canal from ocean to ocean must have locks, and two or three artificial reservoirs. A tidal canal is an impossibility, with sand and mud bottom to wash in with the dominant tide from the Pacific.

Were the Atlantic, with its rocky coast, free from mud, and its tide rising as much higher than that of the Pacific as the Pacific wave rises over the Atlantic, a tidal canal might be less impossible, but under existing circumstances no tidal passage can be cut. I wonder that Dr. Cullen and Mr. Gisborne lend their names to such absurdities! I know nothing of these gentlemen, but they have placed themselves before the public, and I have a right to make this remark. Mr. Buckingham had some design about a long canal from the Chiriqui Lagoon, near Boca del Toro, which changed to an imaginary roadway, and then evaporated; but I think the mountains behind the Lagoon are too high: the same is the case with the Nicaragua route.

The same reasons which induced Mr. Stephens to choose the line for his railroad between Chagres and Panama, may induce some future canal cutters to propose a line not far from the same locality. The railroad will, it is said, be finished in Nov. or Dec. next. It is not a good railroad; it has sharp curves and heavy gradients, and much of insecure foundation; but it is the best railway which could be made on the Isthmus. The same reasoning holds in projecting a canal in that vicinity: there will be many difficulties. The chief are, the difficulty of filling the reservoirs from the head waters of the rivers. This will often be an inconvenience, but possibly not insurmountable; and the American engineers say that the roadstead of Chagres can be greatly improved: as it is, ships of 400 tons can enter, but up to this time nothing has been done, and not a rock blasted, or even a buoy anchored.

It seems desirable that your influential paper should seriously take the matter up; for a false step *at first* may ruin the matter, not as regards Dr. Cullen's Darien Canal only, but as regards any canal at all.

The subject is one of much greater national importance than Englishmen think. I have a mass of notes on the subject, which might be useful in discussing the matter; and if you require any information which it is in my power to give, I shall gladly send them to you.

I fear that Dr. Cullen and Mr. Gisborne have gone on their expedition full of preconceived and pre-determined judgments: and thus I augur little good from their co-operation in it; but a careful comparative survey will set all right. Puerto Escoces is the worst harbour on the Atlantic side of the Isthmus, and the Gulf of San Miguel the worst on the other. I have not personally inspected the ground between these points, and, therefore will not speak of it; but I have crossed the Isthmus of Panama twice, with my eyes open, and write from what I have seen.

I fear the same fate for the present Darien expedition as befel the old one of 1699; but if the scientific world of London, America, and France, take the matter up in a practical form, to effect comparative surveys of the several routes, as I have suggested, much money, much time, and many lives may be saved, and a good serviceable canal be made in half the time it will take to cut a tidal one through the Darien, which would never be clear of mud and sand after it had been open a few hours.

Stuttgardt, Jan. 24.

F. R. G. S.

A WORD TO MINE AGENTS AND MINERS.

Sir,—It has been ascertained that the average duration of life in the labouring mining population is less than that of any other class of labourers. This is attributable to various causes—of which, I think, the chills, caught on their ascent to the surface of the mine while in a high state of perspiration, and their going into deep cold water underground, may be considered the principal, unless the respiration of an unwholesome atmosphere is the most destructive of health: hence consumption amongst miners, and mine agents taken from the ranks of miners. I lived in Gwennap from 1827 until 1835. During that time between 40 and 50 agents of the mines in that parish died: few of them from natural decay. Few persons are sufficiently careful of health: a word to mine agents may not be disregarded. As I know that some of my friends (the agents) have died from chills taken from going into deep water in adits, &c., I would recommend every agent and miner to purchase a gutta-percha, or some other waterproof trousers to put on, in all cases when the water is deep enough to require it. In other cases, waterproof boots should be used—*i. e.*, when the water is shallow. The trousers, of course, must cover the feet as well as legs. If miners could maintain a uniform temperature (blood heat), this provision

would not be required; but such uniformity is next to impossible. One or two agents I know have adopted these articles of dress, so that they ascend from the mine as dry as when they descend into it. As the man-engine has not been adopted in many mines, miners on reaching the surface are usually in a state of great heat, so that in going to the changing-house in cold weather they often contract cold. To prevent this, let them provide an extra coat to put on at or near the shaft, unless the changing-house is close by. I hope that these hints will be considered and adopted.

Truro, Feb. 1. R. SYMONS.

THE GOLD DISCOVERIES IN ENGLAND.

SIR,—Allow me to make a few remarks relative to the gold discoveries in this country, and the use of Berdan's crushing and amalgamating machine, with a view to direct attention to the real state of the question, as far as it is at present known. Taking it for granted that all the trials made at the Windsor Iron-Works are legitimate ones as to the source of the stuff operated upon, the first point to ascertain is the extent of the auriferous rock at the particular locality—a sample of which may have yielded a large per centage of gold. In a letter to me, a few days ago, Sir R. Murchison truly remarks—"The successful issue of the whole scheme of extracting a sufficient quantity of gold from a mass of rock in which gold is diffused in such minute particles as to be invisible to the unassisted eye, manifestly depends not on the goodness of the machine employed, but on the reality and persistance of such auriferous diffusion through very large bodies of rock."

Sir Roderick doubts as yet the existence of these great masses of auriferous rock in Britain, and whether the gold will continue downwards; and I believe most other eminent geologists entertain the same views. But with the greatest deference to men of such scientific eminence, I am inclined to believe that large veins of auriferous mineral do exist in this country. I found this opinion upon two grounds. In the first place upon what appears to me the insufficiency of the arguments of the holders of the opposite theory; and in the next place upon the results of experiments within my personal knowledge—several of which were tried by myself.

Those who express an opinion that gold will not be found in sufficient abundance in this country to yield profitable results, appear to me to be guided entirely in their conclusions by the different stratification in which they state the gold is diffused in foreign countries to what exists in England; this appears to be their main, if not sole, argument. They maintain that the circumstances are entirely different, and that, consequently, the results must correspond.

Now, I believe that the matrix of the gold found in Australia and California is principally quartz, and that gold frequently exists in considerable richness in connection with iron. There is no doubt whatever of there being large quartz veins in this country, principally of that decomposed and ferruginous character termed gossan; and it is upon samples of such lodes that the trials have chiefly been made.

I am aware of one lode, 35 ft. wide, in which a shaft has been sunk 76 fathoms (456 ft.), all one mass of gossan, and the depth not yet ascertained. A number of assays, and several trials by Berdan's machine upon samples taken quite promiscuously from almost every part of the lode, including the deepest point, have yielded gold in sufficient quantities to prove almost beyond doubt that the whole mass of the vein is profitably disseminated with the precious metal. By Berdan's experiments, the results were from 1 oz. to 2 ozs. per ton; while even the assays gave various results to as high as 16 dwts. per ton. It is estimated that about 650,000 tons of the gossan are actually discovered on this lode; and steps are now being taken to test the matter more thoroughly, by raising at least 50 tons, breaking and mixing it together, and taking a ton from the heap for trial.

I could refer to two other instances at least within my own knowledge—in one of which the lode of gossan is from 3 ft. to 27 ft. wide, and has produced about 1 oz. of fine gold per ton; while it holds down to the deepest point seen—namely, 50 fms.; and in the other the lode is 8 or 9 ft. wide, and has yielded 1 oz. 12 dwts. 20 grs., and 2 ozs. 2 dwts. 8 grs. per ton, holding down at least 20 fms., but most likely much deeper. In both these instances the same steps are being adopted to test to what extent the gold is diffused upon a larger scale; and the results of the whole will soon be known, and will be very important even in a national point of view.

While, however, I hold these opinions as to certain cases, which are by no means confined to those I have alluded to, I regret to think that much deception will be attempted upon the public, and the utmost caution will have to be exercised in embarking in British gold mining. Before investing his money, every one should be well satisfied as to the *extent* of the gold-bearing rocks in the particular mine or locality it is intended to operate in, and not be led away by simple assays, or trials by machines, however dazzling they may thus appear. If a sample of a few pounds weight produces 2 or 3 grs. of gold, it is very easy to calculate upon paper how much it would be per ton, and how much profit could be realised upon 1000 tons per month (if they have it), but the whole question will depend upon the *quantity* of the auriferous mineral which can be obtained. I would here merely add that, as ⅓ oz. of gold per ton will yield large profits, higher per centages will, of course, give proportionate results; while the friable nature of the gossans will, in their case, render the pulverising a much easier and economical operation than the same can be performed upon the hard and tough quartz of most foreign gold mines.

Another fact of importance I wish to refer to as connected with gold in England, is the existence of that metal in copper, and even tin ores, but chiefly in the former. In some of the experiments which have been tried on copper ores there have been rich results. This is a matter which deserves the serious attention of the miner. At present, in selling copper ores, the samples are assayed for that metal only, both by the seller and the buyer; nothing is known of the other components of the ore, and when it is remembered that the average produce of the Cornish copper ores is only 8 per cent., one cannot help thinking that it would be worth while to ascertain of what the remaining 92 per cent. is composed, or, at all events, assay it for some other metal or metals as well as copper. Lead ores are always assayed for silver, and in many cases more than 50 per cent. of the price obtained is for the latter.

A considerable number of experiments have also been made on iron pyrites, commonly called mundic, which is very abundant in many lodes in Cornwall and Devon, and in some cases holding down to a great depth, the general results of which have been a highly profitable per centage of gold; but as the mundic usually contains a good deal of arsenic, which damages the quicksilver, and injures the gold, it will be necessary to roast it previous to its being operated upon. In doing this, however, the arsenic itself, as well as the sulphur (another of the chief component parts of the mundic) might be saved, and then the gold could be extracted without difficulty. An important fact may here be stated. The gold found in this country is very pure, in most cases above the standard, thus rendering the process of amalgamation much easier than in the greater number of the foreign gold mines, where the precious metal is not so fine. At the St. John del Rey Mines, in Brazil, the quartz contains an average of 1 oz. per ton, but, partly owing to the comparatively rude mode of working, and the cause just stated, only ⅓ oz. is obtained, although with this a profit of 50,000*l.* per annum is made.

Recurring to the arguments made use of, regarding the dissimilarity of circumstances under which gold is found in other countries and in England, I would further remark that I know not why there should be a fixed and unalterable law for gold, when there are so many unaccountable differences in the laws affecting the existence of other metals, such as copper and lead, not only between foreign countries and England, but even between different localities of this country itself. Copper lodes are found rich in granite, in elvan, and in killas, or clay-slate; and in the case of the well-known Ecton Mines, in Staffordshire, in limestone; and in Cornwall and Devon all copper lodes run east and west, while the Burra Burra lode, in Australia, the Kaw-aw lode, in New Zealand (both celebrated for their richness), and I believe all other copper lodes in those countries, run north by east and south by west. The Burra Burra lode is embedded in limestone, and the Kaw-aw lode in quartz; in fact, the richest copper mine in the world is in quite a different stratification from any copper mine in Cornwall and Devon, and it cannot be said that there are no productive and profitable copper mines in those counties. In Wales, the lodes of the most profitable lead mines run east and west, in Cornwall they run north and south, and there is one in Devon which runs east and west.

With regard to the practicability of Berdan's machine, I am not yet prepared to offer an opinion; I believe that time is required to test it more thoroughly, but in the midst of my numerous engagements, I have been induced to put these hurried remarks together, in the hope that they may tend to the adoption of correct, although cautious, views on a subject which may probably affect materially the prosperity of the country.—38, *Threadneedle-street, Feb.* 9. J. H. MURCHISON.

QUARTZ CRUSHING AND AMALGAMATING GOLD.

SIR,—I would presume so far as to refer your correspondent, Prof. Ansted, again to the letter of mine, which he professes to reply to. It will there be seen that the invited experiment "to be at all satisfactory * * * must have extended over at least 12 hours * * * as shorter experiments are exposed to well-known gross deception." Now, this Berdan's machine has been already shorn of one-half of its pretensions in adopting a so-called improvement, which is simply an employment of the well-known Cornish crusher, to masticate its food for this too much vaunted grinder. It only remains to supply another well-known fact, and call it, too, an improvement, that shall perfect its digestive—amalgamating—process; and thus with a new blade, and then a new handle, we may expect a knife of more or less value. But without confining ourselves to the 10 tons of quartz offered by your correspondent, suppose we double that quantity for a day's work. What we have then that can claim superiority over the common arrastra, where a mule drags one stone over another in the most primitive style? Why, they are precisely alike in respect of work done, differing, of course, in the cost, where the crude machine can be erected by any body or any miner at the expense of a few shillings.

Totnes, Feb. 6. W. E. GILL.

IS MINING A SURE INVESTMENT?

No! Then what is? Nothing under the sun: everything is subject to laws and variations, which often blight our most sanguine expectations. If we plant either trees or corn, we have no certainty of being remunerated with a fruitful harvest. The most skilled husbandman, in order to increase his chances of success, is hourly watching the laws of nature? He also examines his soil, to ascertain what is congenial to its growth, and whether he must plough deep or shallow, experience having long since taught him that one grain must be planted deep to produce a remunerating crop, while another, planted at the same depth, would remain in the earth a thousand years without vegetation. Then, I ask, who is prepared to argue that there is not a law prevailing below the surface of the earth, acting upon lodes and their mineral produce, which might be hourly watched by the miner, and taken advantage of as it would be by the husbandman, to aid his chances of success? The old, experienced tributers in productive mines have long since discovered that there is a prevailing law, which causes the ore to accumulate at certain points; and these they endeavour to find. It appears clear to me, that many of the earth's interior laws are not beyond the comprehension of man. As a guide, let him notice the dips of lodes and strata, the angles of underlies, bearings, intersections, and cleavages, and how the magnetic current, in passing through many lodes, is brought to act on one particular lode. Let him also observe whether ores in lodes are decaying or growing, and why ores are of higher produce near the surface in 19 cases out of 20 than they are in depth. What does the falling off in produce of certain productive mines I could mention betoken? It is time for shareholders to change quarters.

I next bring up the old trumped-up motto, which has been the waste of millions:—"Sink deeper, and you will find ore"—a motto without a precedent. Who ever saw a productive mine that did not make some extraordinary appearance at the surface? Copper, being one of the lightest ores, is found deepest; but even these lodes all produce ore or extraordinary gossan near the surface. The only few exceptions that can be produced against this fact, are a few casual bunches that are formed about intersections of lodes, elvans, or sudden changes of strata, such as from killas to granite. Men who advocate these theories work without precedent, and are not so far advanced as the most illiterate husbandman, who carries lime as manure, but does not know what it is composed of. He candidly tells you that he works by a precedent, as his father did before him, and says it makes corn kern better. I am often taunted as to finding remunerating copper mines at a distance from granite. Let those who do so produce a single precedent in Cornwall or Devon since the creation; and then they come into the field with a lame leg, and not unlikely to be upset. Others say, there are copper mines in Ireland at a long distance from granite; but even these may be in strata which contain the very part that in granite acts as a flux to produce the copper. But the chances for finding remunerating mines in these rocks should be looked at: they are few and far between.

I next turn to LEAD MINES. Here again, we have precedents of certain localities producing that ore, and not a single instance of a propuctive mine but what has produced ore extensively near the surface; but when I look on your weekly reports, and see the names of men who call themselves old and experienced agents advocating deeply sunk mines, and even insuring good results from them, it takes me by surprise. And this causes me to mention the Great Duchy Lead Mine, though not with the view of prejudicing the shareholder, nor of injuring the purser or captain, with whom I am on the best of terms; but from its being the last commented on in your Journal on that theory. This mine showed traces of lead at surface, and I thought they acted very judiciously in putting up a small portable engine to try down a few fathoms. In doing so, however, they found no improvement, and I then advised them to extend the 15 fathom level, and if they did not cut ore in it, the chances would be against them. They did so, and say that the lode improved going eastward, but rose little or no lead; they then abandoned the levels, and are gone to sink a new shaft to cut the lode 40 fathoms deep, to find lead. Then, I ask, where is the precedent?

In making these remarks I lay myself open to be tested by the public as to the result; but I fearlessly assert, that if ever that lode produces lead to a remunerating extent, it will be found to crop out at the surface, and could have been easily discovered at the 15 fm. level.

I sincerely hope the company will fairly test this mine, as I stand or fall by it. I have fifty other reports out to the same effect, many of which are before the public, and the remainder in private hands, and which will be sure to come out if one goes contrary to my views. Many of them are already, like Wheal Hamlyn, gone *sine die*, and many more have caught a glimpse of the grim messenger rising in the horizon. Will they decoy him with a golden shield? N. ENNOR.

Wivelscombe, Feb. 2.

IS COAL TO BE FOUND AT A WORKABLE DEPTH NEAR LONDON?

SIR,—In last week's Journal you published a communication from "A Newcastle Pitman," on the interesting and, commercially, important question, "Is coal to be found at a workable depth near London?" This question, although occasionally reverted to, has never, I believe, been scientifically discussed or placed in so enticing a light as by your correspondent. This neglect has probably arisen from a too hasty leap at conclusions, taking it for granted that geological admeasurement of the various strata was correct, and that all our capabilities of science and mechanism are insufficient to enable us to reach a depth of two miles perpendicularly beneath the surface of the earth. It will be seen that your correspondent implies a hope that the coal measures might be won at a workable depth at no great distance from London, from want of uniformity of the strata, from its variable degrees of thickness, or from the absence of some formations altogether, bringing the seams of coal nearer the surface than is now anticipated.

Your geological readers will call to mind the fact, that towards the end of the last century erroneous views were entertained as to the existence of coal of sufficiently good quality at a workable depth beneath the magnesian limestone of the county of Durham. Dr. William Smith, previously a surveyor and engineer, of remarkable natural shrewdness, the "father of English geology," and the constructor of the first geological map of England, examined the district, and found that the limestone was an "unconformable" cover to the coal strata below; that is, that it lay upon the inclined edges, as a book placed horizontally on others which are vertical. He traced the coal strata in their courses, conjectured their rise under the limestone, estimated their thickness, and inferred from these observations that the best seams would be found at Haswell, a few miles from Durham. Some landed proprietors were induced to make the experiment, which succeeded equal to Dr. Smith's most sanguine expectations, and many are the proprietors who have reaped princely incomes from the discovery.

The new red sandstone, like the magnesian limestone and basalt, was for many years considered inimical to the existence of coal, and on reaching it a bar was put to further exploration, particularly in the coal fields of Somersetshire and Lancashire, the colliers of which counties had a motto—"No coal beneath the red earth;" yet there is now no doubt but that these coal measures, and those of Wales, underlie this sandstone formation.

The question is a most interesting one, and worthy discussion by your scientific correspondents, if not an experimental boring, for information of the real existence and position of the strata, which should consist of London clay, upper and lower chalk, greensand, gault, the oolites, lias, and new red sandstone formations.

Swansea, Feb. 7. A WELSH MINER.

SCHOOL FOR MINERS, AND MINERS' INSTITUTE.

SIR,—I am keeping a careful watch on the movements of the committee appointed to arrange matters for carrying into effect the design of the Central School, as proposed for the town of Truro. I am also waiting with anxiety to learn if the scheme will embrace the districts named in which branch schools are to be established, under the fostering care of the Committee of the Central School. Should the latter be adopted and carried out, all my efforts will be completely swallowed up, so far as the independance of my scheme is concerned; but even then I shall be bound to contribute what I at first offered, and to this I will add my views will also be met. Only let the class whose cause I advocate be benefitted, and I shall be perfectly satisfied. It sometimes so happens that our enthusiasm outruns our judgment, and in attempting to do everything we fail to do anything of real worth. I hope this will not apply to the recent movement in the town of Truro to establish Central and District Schools at one and the same time; if so, I fear the gentlemen comprising the committee and others have not made themselves acquainted with the following maxim, how to do good. Dr. Johnson wisely said, "He who waits to do a great deal of good at once will never do anything." Life is made up of little things. It is but once in an age that occasion is offered for doing a great deed. True greatness consists in being great in little things. Thus, drops make the ocean. Hence, we should be willing to do a little good at a time, and never "wait to do a great deal of good at once." If we would do much good in the world, we must be willing to do good in little things, little acts one after another, speaking a word here, giving advice there, and setting a good example all the time. We must do the first good thing we can, and then the next, and the next, and so keep on doing good. This is the way to accomplish great things. Thus, only, shall we do all the good in our power.—*Austinfriars, Feb.* 9. R. C. MANUEL.

THE MAN-ENGINE, &c.

SIR,—You are aware that in this county, and generally throughout the British mines, the ores, rubbish, &c., are drawn to the surface either by horse or steam whims; by the latter in all, or most, deep mines. The buckets containing the ores, &c., are drawn through the shaft just as a man draws a winze-kibble, or a maid draws water from a well, without any guides to restrain the kibble in a direct course. The consequence of this is, that in the ascent the kibble is almost continually striking the sides of the shaft, thereby causing damage to the kibble, but more particularly to the casing of the shaft, and to the rope or chain attached to the kibble, which is not unfrequently broken. In a deep mine, and particularly in an underlying shaft, the injury to both shaft and rope, or chain, is incalculable. It has been asserted that in a deep mine—Wheal Vor, for instance—a loss of hundreds a year is consequent upon the wear and breakage in this way. The present proprietors of that mine will, I doubt not, effect a material saving in this, and in other respects, over their predecessors. Now, what I would take the liberty to suggest is this:—1. That in all mines, except, perhaps, very shallow ones, there be erected guides in perpendicular shafts, and rails in underlying shafts, for keeping the bucket, or carriage, in a given course, by which arrangement the evils adverted to may be avoided.—2. That instead of the miners, in deep mines, using ladders or man-engine, they be enabled to use a properly constructed bucket, having the power of communicating with the engine-man at the whim, so that they may get in or out at any required level; and 3. That for the prevention of accidents, contingent on the breaking of ropes or chains, the apparatus invented by Mr. Fourdrinier, and advertised in your Journal some months ago, or some other such apparatus, be adopted in all cases.

I do not pretend to novelty in this plan; for I know that in a few mines belonging to Messrs. Taylor, and in some German and Welsh mines, the guides are now in use, so far as drawing the ore, &c., is concerned; but, in addition to their use for such purpose only, I would recommend that the kibbles be so constructed as to admit of the miners' descent and ascent thereby with safety. I shall not enter into any details just now, confining myself to the mere suggestion; and concluding with the interrogation,—Cannot the expensive man-engine be dispensed with, and the labour of miners reduced.—*Truro, Feb.* 6. R. SYMONS.

THE GREAT WELSH SILVER-LEAD MINE.—The cause, Gibson *v.* Arrowsmith, was re-argued in the Court of Exchequer, on Tuesday. It will be recollected that an action was brought by Mr. Henry Gibson on two bills of exchange for 500*l.* each, given by Mr. Arrowsmith to him, as security for 1000*l.*, advanced on the occasion of the purchase of a share in this mine. The defendant pleaded that the bills were obtained by fraud and covin. At the trial before Mr. Baron Martin it appeared that the plaintiff was the purser of the mine in question, and that the defendant had certainly been induced to become the purchaser of the share at an auction held at the offices of the mine through his reliance on the representation of the plaintiff, made to others as well as to himself, that the mine in question was a real "mine of wealth." The chief statements relied on by the defendant were, that a certain monster "nugnet" of lead and silver was produced by the mine, and that there were "thousands of ore within sight." No distinct evidence was given by the defendant to contradict the truth of these representations, but the case rested chiefly on a certain admission imputed to the plaintiff that there was nothing to be expected from the mine, and the fact that hitherto the "mine of wealth" had produced nothing but disappointment to the adventurers. The jury, however, found for the defendant, and subsequently this rule for a new trial, on the ground that there was no evidence to support the plea, was obtained. Mr. Barstow now appeared for the defendant, and contended that there was abundance of ground for the verdict. Mr. M. Chambers, Mr. Slade, and Mr. Beasley, were not called on, the Court being of opinion that the evidence adduced by defendant, though it went to make out a mere *prima facie* case, was not yet sufficiently strong to warrant the jury in affixing the stigma of fraud on plaintiff. The words used by him, when alluding to the contents of the mine, might well have been mis-reported, and, as it was open to the defendant to disprove the representation of the plaintiff, by calling some one who had examined the mine, and could state positively whether there were anything like thousands of tons of ore in sight, the rule for a new trial ought to be made absolute, unless the defendant would consent to a non-suit being entered. Mr. Barstow elected the latter alternative, and the rule was accordingly so moulded. Rule absolute to enter a nonsuit in lieu of the verdict for the defendant.

THE FATAL COLLIERY EXPLOSION AT KILNHURST.—The enquiry into the circumstances connected with this painful accident was brought to a termination on Wednesday. The works, which are situate at Kilnhurst, near Rotherham, had only been commenced about four months, and from the evidence of Mr. C. Morton, one of her Majesty's Inspectors, it appeared that the ventilation was very imperfect. Evidence was also given to show that the mine was, in other respects, wretchedly conducted. Ralph Ainscough, 34, the underground steward, descended the pit for the purpose of inspecting the works, and finding his lamp gave a dull light, he unscrewed the top, and a dreadful explosion almost immediately ensued, from which he died. Henry Fitton, another collier, was severely injured, and is not expected to recover. There were six or seven other workmen in the pit at the time, but they providentially escaped serious injury. The jury returned the following verdict:—"The jury are unanimous in their verdict, that the death of Ralph Ainscough was caused solely by his own recklessness and folly, in exposing a naked light in the workings of the new coal-pit at Kilnhurst, charged with sulphur, and not at all ventilated; and in giving our verdict, we are also unanimous that the proprietors have not used due caution in the appointment of an efficient and qualified person to have the care and superintendence of so many lives."

GEOLOGICAL AND STATISTICAL NOTES ON IRISH MINES.

BY THE REV. SAMUEL HAUGHTON, PROFESSOR OF GEOLOGY IN TRINITY COLLEGE.

No. I.—BALLYMURTAGH SULPHUR AND COPPER MINE.

This mine is the most westerly of a group of mines, worked on a series of parallel lodes or veins, at both sides of the Ovoca, in the county of Wicklow. The average strike of these lodes is north of east and south of west; in Ballymurtagh itself it is E. N. E. (true bearings), with an underlay south, varying from 50° to 70°. A fine of fault appears to separate the mines on the west of the Ovoca from those on the east; the direction of the heave being left-handed, throwing the mines on the west bank of the Ovoca to the south.

The rock of the country is lower Silurian slate, which is generally, in the neighbourhood of the mines, of a dark colour, from the presence of hornblende, and frequently assumes the green colour and greasy feel of talcose slate. The Bell Rock, to the south of the mine, is a grey quartz rock, almost infusible, but containing small particles of a dark mineral, which fuse when exposed to a considerable heat. This rock is bedded conformably with the slate, and appears to have undergone considerable metamorphic action, although it is difficult to imagine that it was ever fluxed.

Quartz spar, as might be expected, is of common occurrence in the mine, particularly in the lode called the "Spar Vein." I have found also in the lower levels of the copper lode carbonate of lime, containing a considerable quantity of magnesia. This occurs in the green greasy slate.

The mines of this district, reckoned from west to east, are,—Ballymurtagh and Ballygahan, on the west of the Ovoca; and Tigroney, Cronebane, and Connorree, on the east. Indications of pyrites exist at each extremity of this mineral district, but not in sufficient quantity to pay for working.

The minerals raised at Ballymurtagh are iron and copper pyrites, which are mixed together in very variable proportions; the quantity of copper pyrites generally increasing as the mine is worked in depth.* The pyrites does not appear to occur in a regular lode or vein with definite walls, but to be diffused through the slate which forms the country in beds, which are stratified conformably with the slate itself; it does not occur pure, but intimately mixed with the slate; the iron pyrites occurs in greatest abundance near the surface of the lode or bed, which becomes richer in copper pyrites as the mine increases in depth.

There are at present five lodes or beds worked on the Ballymurtagh Mine, parallel to each other, and conformably to the bedding of the hornblende slate and quartz rock of the district. These lodes, reckoned from the southern extremity of the townland, are—

The south, or copper lode.	The pond lode.
The pyrites lode.	The North Mine, south lode.
The North Mine, north lode.	

The first two of these constitute the old mine; the latter are recently-discovered lodes, which were not worked until the mine became the property of the Wicklow Copper Mine Company.

The second, or pyrites lode, joins the first, or copper lode, at about the 56 fm. level, below which there is only one lode, which is worked to a depth of 160 fms., the lower part being particularly rich in copper.

The north lode is principally worked for iron pyrites, but occasionally considerable quantities of copper pyrites are found in it; recently a quantity of native copper, 28 lbs. in weight, was found in this mine. The back of this lode is characterised by a remarkable bed of brown hematite, which lies upon the bed of iron pyrites. A careful analysis of an average specimen of this hematite, made by the Rev. Joseph A. Galbraith, gave—

Peroxide of iron	74·37
Clay and silica	11·00
Water	14·12
Volatile matter	0·41
Loss	0·10=100·00

The metalic iron in this ore amounts to 52 per cent.; and as it is free from phosphoric acid and sulphur, it is a valuable ore. At the present price of, and demand for iron, this ore would be worth from 15s. to 17s. per ton in South Wales.

No. 1. The copper, or south lode, has been worked extensively from near the surface over an extent of about 200 fms. long, and down to the 110 fathom level, about 150 fathoms deep.

No. 2. The north pyrites lode is opened to 60 fathoms deep, and extended about 70 fathoms.

No. 3. The south lode, north mine, is opened to 30 fathoms deep, and extended 40 fathoms.

No. 4. The pond lode is opened 110 fms. deep, and extended as under:—

At Margaret's level	60 fms.
At 18 fm. level from north cross-cut	40 fms.
At 56 fm. level from north cross-cut	8 fms.

About 12 months ago all these lodes were proved in depth by the driving of Margaret's level, and still more recently the pond lode has been proved by cross-cuts from the south mine, at the 18 and 56 fm. levels. This lode has been found, like all the other lodes in Ballymurtagh, to become richer in copper in depth. In driving Margaret's level, a spar vein, 70 ft. thick, was cut to the south of the north pyrites lode. This spar was composed of sugary quartz, presenting the vughy appearance which is considered by working miners so valuable as an indication of a mineral lode underneath. The iron pyrites generally occurs in all lodes near the surface, to the depth of about 50 fms., varying in width from 4 to 36 ft., and in hardness and quality in proportion as the ore is mixed with ribs of copper pyrites, or the slate or killas of the country. It contains from 35 to 40 per cent. of sulphur, capable of being used for the manufacture of sulphuric acid: it was proposed as a substitute for brimstone in 1839, in consequence of the high price of that article, occasioned by the greediness of the Neapolitan Government, who had a practical monopoly of the sulphur trade by the possession of the Sicilian sulphur beds.

The first cargo of pyrites, as a substitute for Sicilian sulphur, was sent by the Wicklow Copper-Mine Company on the 28th December, 1839, to Messrs. Newton, Keates, and Co., of Liverpool, the price received for this cargo being 37*s.* per ton of 21 cwts., free on board, the reported produce being 40 per cent. of sulphur, and 1¼ per cent. of copper. The experiment thus tried proved eminently successful, as is shown by the third and fourth columns of the accompanying table:—

An account of ores raised at the Ballymurtagh Mine in the following years:—

Year.	Copper ore.	Cop. pyrites.	Pyrites.	Total tons.
1834	2,821	—	—	2,821
1835	5,094	—	—	5,094
1836	4,569	—	—	4,569
1837	5,666	—	—	5,666
1838	6,457	—	—	6,457
1839	4,980	—	—	4,980
1840	6,706	—	500	7,206
1841	3,300	—	16,423	19,723
1842	4,779	—	14,793	19,572
1843	4,540	—	11,795	16,335
1844	5,180	—	8,363	13,543
1845	5,056	—	15,196	20,252
1846	4,738	1,500	11,453	17,691
1847	3,660	3,000	12,170	18,830
1848	3,054	3,707	12,014	18,775
1849	3,613	4,000	9,300	16,913
1850	3,757	4,000	10,497	18,254
1851	2,032	4,000	19,802	25,834
1852	2,233	4,058	24,472	30,763
Total tons	82,235	24,265	166,778	273,278
Add raisings half-year ending September, 1852	1,150	2,000	12,700	15,850
Tons	83,385	26,265	179,478	289,128

The quantity of copper ore raised in the twelve years ending 31st December, 1853, was about 25,000 tons.

To understand this table, it should be observed that the ore raised in Ballymurtagh is divided for sale into three classes:—

1. Pyrites or sulphur ore. 2. Coppery pyrites. 3. Copper ore.

1. The sulphur ore contains, on the average, 35 per cent. of sulphur, capable of being extracted.

2. The sulphur copper ores are divided into two classes, the poorer containing about 1¼ per cent. copper, and the richer about 3 to 4; both these classes contain 35 per cent. of sulphur, and are sold to the acid manufacturers, who allow a price for the copper, and send the ore, after being roasted for sulphur, to the Swansea ticketings.

3. The copper ores contain from 3 to 10 per cent. of copper, and are sent direct to Swansea from the mine.

The third and fourth columns contain the total quantities of sulphur ore raised and sold by the Ballymurtagh Mine from 1840 to 1852. In 1840 the price at which pyrites could be delivered in England was about 30*s.* to 35*s.* per ton; the corresponding price of brimstone being 12*l.* per ton. Previous to the monopoly in sulphur, the price, taking the average for 15 years, was 7*l.* per ton. The present price of pyrites is from 20*s.* to 21*s.* per ton, and brimstone about 6*l.* The capabilities of the Wicklow Mines for producing pyrites is very great, the shipments while the demand lasted in 1841 having been nearly 100,000 tons, producing 40,000 tons of sulphur.

The pyrites vein, or "sulphur course," is what miners call the parent vein or matrix of the lode; it continues, mixed with the copper pyrites, down to the very bottom of the mine, where the copper sometimes reaches 10 per cent. of the ore, and is the shallow workings copper is never totally absent, being generally ½ per cent. even of the pure pyrites lode.

The water issuing from the pyrites workings is strongly impregnated with copper, and on being passed over plates of iron yields a precipitate containing from 10 to 30 per cent. of copper.

As no records or maps exist of the former working of this mine, the early history of it is involved in difficulty.—as all the knowledge now possessed of the working previous to 1822 is founded on the verbal statements of old persons, and such data as have been obtained from time to time from the Messrs. Camac and Kyan's accounts.

The Ballymurtagh Mine, about 85 years ago, was worked by Mr. Whaley, who is said to have made a large fortune from the copper ore raised on the south lode, at depths hardly exceeding 40 fms. These old workings, which have been since partially explored, show evident traces of rich branches of ore having been taken away, and subsequently by the application of tut work and better means of bringing the ore to grass, large quantities of copper ore, of about 7½ produce, were obtained from these old places. Mr. Whaley, besides the advantage of shallow depth, had labour of the cheapest kind, and very high market prices for his ores.

In the year 1780 the workings were resumed by the Hibernian Mine Company, being then about 45 fms. deep, and drained by an expensive and uncertain system of hand pumps. This company expended a large capital in more fully opening the lodes, operated largely on the copper as well as the sulphur lodes, when the latter contained a portion of copper, and after erecting calcining and smelting works, making vitriol and precipitate copper, were finally obliged to abandon the concern, after sustaining a large pecuniary loss, about the year 1800.

The mine then lay idle, or nearly so, until 1822, when it was undertaken by a few private individuals, who subsequently formed the Wicklow Copper Mine Company. During the next 10 years the results were uncertain and unsatisfactory, much difficulty arising from the ruinous state in which the mine was left by the Hibernian Mine Company, the continuance of inefficient pumping and drawing machinery, or rather the nearly total want of them. These and other causes retarded the efficient prosecution of the works until the year 1832, since which period the mine has been very successful.

I cannot conclude this short account of Ballymurtagh Mine without expressing my obligations to Mr. Edward Barnes, mining agent of the Wicklow Copper-Mine Company, to whom I am indebted for the information relating to the present state and former working of the mine.

* Sulphuret of zinc, or blende, is also occasionally found to occur in large masses, combined in a remarkable manner with sulphurets of lead and iron.

AUSTRALIAN AND CALIFORNIAN GOLD MINING SHAREHOLDERS' COLUMN.

AVE MARIA GOLD QUARTZ MINING COMPANY.—No. II.

Sir,—Since the appearance of the *exposé* in your columns, I have received a mass of correspondence on the subject, from which I select the letter from Mr. Christian :—

"Sir,—My name appearing in the last Number of the *Mining Journal* as secretary to the Ave Maria Mine, in California, I have to inform you that I have now no connexion with that *respectable* company, and further to state that there is now no such company in existence at or near Mariposa, in California, the shop (for two very good reasons) having been shut up nearly 18 months. In the first place, there was not a particle of gold to be seen in any of the company's veins; and, secondly, the manager had not been supplied with sufficient funds to carry on the works, had they been ever so rich: the staff and men were then necessarily disbanded to do the best they could. Fortunately I was enabled to get home very soon after this took place; the poor miners are there now, I believe. When I reached England, in November, 1852, I was very much surprised to find the shares of the company going rapidly to a premium, as I knew how matters really stood at Mariposa, and that the directors had been thoroughly informed of the same by their chief acting agent in California. However, after a short time, I discovered they had published some extraordinary accounts of having obtained a rich district in the northern mines. I never could ascertain why their affections should be so suddenly changed, neither could I understand why the staff in California had not been apprised of this circumstance. According to the accounts I read, they had been in treaty for this New York Mine some months previous to my return. I assure you, at the time of my leaving San Francisco, the manager knew nothing of this sleight of hand; the reason he assigned me for abandoning the works was that he had not been supplied with sufficient funds by the directors to carry out his instructions. If the correspondence that passed between Mariposa and 124, Bishopsgate-street, had been published, I very much question if there would have been at the present time such a company in existence in London as the Ave Maria Gold Quartz Mining Company; at all events, I do not believe the shares would ever have attained the premium they have done. I will write to you further upon the subject of this letter.—W. Christian: *Baldoch, Feb.* 1."

Another friend, "Amico," refers me to the newspapers of the 25th Jan., in which, under the head of bankruptcy, I shall see 170*l.* received by the bankrupt, Kirk (connected with the Islington Cattle Market), for attendances as director of the Ave Maria. I have just put down, with much surprise, the *Daily News*, containing an advertisement from Mr. Kenworthy, of which I cannot make out the drift. My position enables me to pass over all he has said of me with silence. I can assure him that the public are unanimous in their approval of my arduous labours, and in the subscription rooms which I frequent, such as Lloyd's Underwriters' Room, Gresham Club, Tattersall's, London Club, &c.; I have never heard a dissenting voice. The *Mining Journal* wants no defender. It has always pursued an honest and straightforward course, encouraging legitimate enterprise, more particularly in the United Kingdom, by all the means in its power, and assisting those unfairly duped to shame the parties to a sense of their conduct. Whenever we see a defence of the Ave Maria attempted, we ought devoutly to say numerous Pater-nosters.

H. Guedalla.

Paris, Feb. 6.

THE WEST GRANADA (OR VERAGUAS) GOLD AND SILVER MINING COMPANY.

Provisionally registered, pursuant to 7th and 8th Vic., cap. 110. Capital, 100,000*l.* in 100,000 shares of 1*l.* each, to be paid in full on allotment. With power, upon the adoption of the agent's report, to increase the capital to 200,000*l.*

Trustees.—Frederick Mildred, Esq., Nicholas-lane; G. Clive, Esq., Eaton-square.

Directors.—George Thomas Braine, Esq., chairman, 8, Hyde Park-terrace; Charles Barber, Esq., Croydon; George Clive, Esq., 20, Eaton-square; Frederick Mangles, Esq., 17, Gracechurch-street; Benjamin Shaw, Esq., the Priory, Kilburn; George Such, Esq., M.D., F.L.S., 21, Nottingham-street, Regent's Park; Joseph Thompson, Esq., 43, Gloucester-terrace, Hyde Park; Marmaduke Wyvill, Esq., M.P., 13, Chesterstreet, Grosvenor-place; Alexander Young, Esq., 11, King William-street.

Bankers: Messrs. Masterman, Peters, and Co., the Commercial Bank of London.—Brokers: Messrs. Hichens and Harrison, 18, Threadneedle-street.—Solicitors: Messrs. Baker, Ruck, and Jennings, 34, Lime-street.—Secretary: Mr. William Webb, C.E.—Offices of the company: 11, New Broad-street.

This company was admitted on the Stock Exchange on the 30th Dec. 1852, with only 35,000 shares paid on by the public. The vendor receives 40,000 free shares, and 25,000 more by-and-bye, under certain contingencies. I shall now state candidly and fairly what I consider to be the defects which will in the end sink this promising vessel. In the first place, too great a power in voting is in the hands of the vendor, as, in fact, I expect very few of the public will now sign the deed required to be executed before the 23d Feb., in order to vote at the meeting to be held on the 2d March. No scrip should have been issued till the deed was signed. It is now too late, 18 months after the payment to bankers, to say this must be done. The public ought to know the consequences of signing a deed. A holder of 10 shares is liable for any enormous contracts made by directors. I am not quoting this in reference to this company alone, but to show the necessity of a new Act of Parliament, limiting liability *pro rata* to each shareholder. We have had no balance-sheet or meeting up to the present time, and we ought to know the number of shareholders and shares who are our associates. I now generally find meetings and registering as the precursor of another call.

A dead set is made against this company out of doors, and more particularly on the Stock Exchange. I have been at some pains to trace out the reasons of this prejudice, from knowing the position and integrity of some of the board—to wit, Messrs. Clive, Barber, Mangles, and Wyvill, and have no hesitation in saying it is owing to the unpopularity of the chairman, G. T. Braine, Esq. Being on delicate ground, it may be sufficient to cite one of the numerous companies with which he is connected, in order to show why the Stock Exchange will not invest or deal in West Granada shares. The Coosheen rig will never be forgiven by them, and very properly too. A wag suggests that if little naughty boys will throw stones at large fowls they must expect to be seized in their voracious jaws, and sure to be *a cotchin* it.

Paris, Feb. 6.

H. Guedalla.

P.S.—I paid 75*l.* last March on 75 shares, St. Jago Nuggets, an infant prodigy of the Veraguas. Will the secretary, or any of your numerous correspondents, enlighten me as to the cause of a twelvemonths' silence? and why, as but little money was got here, the present scripholders are not allowed to retire, minus 2s. a share for expenses? John Masterman, Esq., jun., is reminded that such unbusiness-like conduct does not prevail in Nicholas-lane.

Feb. 8.—What is the meaning of the most appropriately termed "*extraordinary* general meeting of the shareholders," convened for the 14th inst.? Because, out of compliment to the vendor, it is St. Valentine's day. Joking apart, the five resolutions proposed to be adopted appear to me most suicidal; and immediately after receiving the balance-sheet from the directors, which will show that all our funds are exhausted, the meeting ought to adjourn to consider the best steps to be taken under the circumstances. How did the company ever obtain the admission into the Stock Exchange, with so few shares taken up by the public? We have been amused with splendid accounts for twelve months, and now of course, being hard up, "the governor" is applied to. How can they increase the capital stock of the company by the emission of new shares, when the old ones, with 20s. paid, are worth only 7s. 6d.? If they are issued at the latter figure, the old proprietors will be completely swamped. We then come to the novel proposition to pawn the mine (a 20s. a share gold mine!) for 20,000*l.*, which is certainly an original expedient. The plain, straightforward course appears to me to be as follows, even if the directors are to have our confidence, which they do not deserve, for 18 months ago continuing the company with so few shares paid on. I am quite sure every man could recover his 20s. per share at law, for my 200 were purchased in the market under the full impression that the whole capital had been subscribed. This company ought to be re-formed, and all scripholders should have an opportunity of receiving back 10s. a share in lieu of all demands; the rest they richly deserve to lose, for rashly rushing into the concern, aptly denominated Vera Aqua, or green water, and fairly entitling the shareholders to be called greenhorns. Those who do not wish to retire should have a call of 10s. a share made on them. The chairman and Alexander Young, Esq., should retire, and two new names should be added by ourselves. Hitherto they have been self-elected and self-paid, and we now see the consequences. Those interested ought to require some explanation for this suddenly convened meeting, at so short a time after an advertisement convening the general one in March.

H. Guedalla.

WEST MARIPOSA MINE.

What is the reason of the mysterious silence preserved? The shareholders are getting very clamorous, as they are sure it bodes no good. It is said that their chief agent was a Mr. M'Dougal, assisted by Messrs. Hoistch, Morcom, and Hicks. The conduct of the chief so disgusted the others, that they each threw up his appointment, as they gave out, to be free from such an association. Hicks having returned to England, was sent out again by the self-constituted and self-paid directors, and he is alone now at the Pittsburg Works, in Grass Valley. Mr. Murray, a director, returned to England three months ago, with 80*l.* worth of gold, we are told, from these works, upon which the shares became saleable at 20s. each; but as the public find they cannot get a regular balance-sheet, or any satisfactory information, they have fallen 50 per cent., or to 10s. a share. Mr. Killaly has succeeded Mr. M'Dougal.

H. Guedalla.

GOLDEN MOUNTAIN OF MARIPOSA.

It gives me pleasure to state, that Mr. Downes, whose name was in the original prospectus, printed at the end of October, 1851, wrote letters to the directors and to the secretary, Mr. W. P. Robertson, dated 22d and 24th November, declining to be a director, and refusing to take any allotment of shares. He has, therefore, no subsequent knowledge of the proceedings; but it would have been much more satisfactory to the public (many of whom, most probably, subscribed from seeing a name so honourably known) if he had extensively advertised his secession in the public prints.

H. Guedalla.

AUSTRALIAN FREEHOLD GOLD MINE.

The farce was finally played out on Monday last. No public notice was given of the meeting, and a pretty set, it is said, were present. When such an example is shown by those who ought to know better, can we be surprised at the smaller fry of gold companies imitating their betters in what they consider as the standard of morality, high principle, and business-like conduct? Really it is useless to waste words any longer by appealing to honour: nothing but law will enforce our equitable rights. Clergymen have been great sufferers by these bubbles, and I am afraid it will be utterly useless for them to preach from the pulpit a sermon on the necessity of giving a proper account of one's stewardship, and of the duty of one man towards another. If Matthews and Knell got free shares for a swamp, did not the directors and *employés* appropriate to themselves free shares? If Chancery proceedings are being taken with our money, and without our consent, against the former, ought not we to institute a suit also for the recovery of the latter from the directors. Publish a balance-sheet of income and expenditure in the *Mining Journal*, you committee of self-elected, self-paid mismanagement!

H. Guedalla.

Gold in Cornwall.—At the Geological Society, Mr. Pattison, F.G.S., read a paper on the Auriferous Quartz in North Cornwall. In the parish of Davidstone, in the north of Cornwall, slate rocks, with veins of coarse quartz, and interstor. These slates are a prolongation of the Petherwyn beds, and belong to the Upper Devonian series. In the quartz veins of these slates the author sought for and discovered gold. In some places the quartz has ferruginous partings, and contains gossan,—it is this quartz, and in the vicinity of trappean intrusive rock, that was found to be auriferous.

Meetings of Mining Companies.

CALLINGTON MINES COMPANY.

A meeting of shareholders was held at the offices, Salvador House, Bishopsgate-street, on Tuesday, Mr. Peter Stainsby in the chair.

The notice convening the meeting having been read, the subjoined statement of accounts for three months, ending with cost for December, was submitted :—

Balance last account	£1380	7	11			
Mine cost, October	450	11	5			
Ditto, November	683	14	4			
Ditto, December	446	5	5			
Balance of interest and discounts	47	3	11	= £3038	3	0
Lead ore sold, Nov. and Dec.	£ 881	12	3			
Copper ore sold, December	219	7	3			
Spare materials sold	483	7	1			
Call of 5*s.* per share	1250	0	0	= 2834	6	7
Leaving balance against adventurers				£ 203	16	5

Mr. Stainsby then read the following report, which he thought the meeting would be of opinion was a very valuable one :—

February 6.—Kelly Bray lode, in the 80 fathom level, is being driven east of the shaft 40 fms.; the lode in the end is 1 ft. 9 in. wide, composed of quartz, mundic, and good stones of copper ore, having two well-defined walls—the strata being much mineralised, and water strongly issuing through the ground. This level is now driven to within 10 fms. of the point east to where the course of ore was intersected in the 70 *fm.* level; and should this course of ore continue in depth with its dip, or declination west, we might expect to reach it by driving the 80 fm. level 5 fms. further east, which we calculate to complete by the middle of next month (March) —the ground being favourable for driving, now set at 6*l.* 10*s.* per fm. The winze in the bottom of the 70 fm. level east is being sunk 3½ fathoms. We are sinking to the south side of the lode, leaving the lode standing to prevent the water from impeding our progress in sinking. We calculate the winze to be sunk to the 80 by the time the 80 end reaches that point; and when this communication is made, it will greatly facilitate our operations in this department. The lode in the 70 fm. level east is 3 ft. wide, composed of fluor-spar, mundic, blende, and good stones of copper ore. The 70 cross-cut is being driven north of Kelly Bray lode 46 fms., which is 4 fms. north of the branch wrought on; the strata still abound with mineral branches. Three small branches have been intersected in the last 1 ft. driven; each and all these branches dip north, which indicates the lode, or part of the same, to be still further north.—Lead Lode: The lode in the 40 fm. level, south of the count-house shaft, is 15 in. wide, composed of soft quartz, mundic, and lead ores—saving work. The lode in the 20 fm. level, south of the incline shaft, is 6 in. wide—saving work; the lode in the north end in the 20 fm. level, north of incline shaft, is 10 in. wide, good saving work. Each of these ends are laying open moderate tribute ground. The length of the levels driven in the 20, north and south of the incline shaft, both include 26 fms. The lode in the 10 fm. level, south of the incline shaft, is 9 in. wide, composed of spar, mundic, and lead ore; this end is being driven on tribute at 13*s.* 4*d.* in 1*l.* for lead only. Our tribute departments, both on lead and copper, are a little improved. We hope to sample a parcel of rich silver-lead ore, on the 20th instant, of about 25 tons.—T. Woolcock; S. James.

Mr. Ensor moved that the report and accounts be received and adopted.—The resolution was seconded and carried unanimously.

A list of shareholders whose calls were in arrear having been laid before the meeting, it was resolved that at the next general meeting, to be held on the 7th April, the meeting be also made special, for the purpose of forfeiting all shares upon which calls are due and are not paid on or before the 6th of April.

Mr. Ensor said it was desirable that a section of Kelly Bray and Rowe's lode should be prepared and laid before the shareholders. There were most important indications in the 70 cross-cut north, but what they imagined to be Rowe's lode was still further north. There was not the slightest doubt that Rowe's and Kelly Bray would be found most productive lodes, and as they got deeper the richer they would find them. They had now at least 500*l.* worth of rich silver-lead ore sampled, so that the Callington Mines were at length more than meeting their costs. This immense property, upon which, perhaps, from 100,000*l.* to 150,000*l.* had been expended, was now, he was happy to say, becoming remunerative, and would, no doubt, have become so before this, but they had been compelled to circumscribe their operations, in order to study the pockets of the shareholders. In his opinion, they had now only to drive further north to arrive at the most profitable results. He considered the indications the finest ever seen, and that if the Callington Mines had been worked for copper instead of lead, it would have been one of the leading mines of the day. Its success, however, was in his opinion now placed beyond a doubt.

Mr. Stainsby observed that he had kept to the mine through good and bad repute, and was still sanguine as to its success. He might also mention that the amount of ore on hand, referred to by Mr. Ensor, would bring nearly 600*l.* instead of 500*l.*

Mr. Ensor proposed a vote of thanks to the chairman, after which the business of the meeting terminated.

Carrack'-Dews United Mines (St. Ives).—Mr. Eley yesterday received from Mr. Mitchell, of Bishopsgate-street, certificates of the assay of samples of orestuff, mundic, and gossan, from three lodes in this mine, which show the following results:—Carrack-Dews, south lode, 6½ per cent. of fine copper; Eley's lode, 8½ per cent. of fine copper; Carrack-Dews, north lode, 10¾ per cent. of fine copper. These samples were broken only 4 fms. from surface, and forwarded without any dressing or picking out of any refuse whatever. This return, as will be seen, is considerably above the average quality of ore raised in Cornwall.

North Derbyshire—Mineral Liberties of Ashford and Calver.—Among the numerous successful adventures in and around our mineral boundaries is one, which, though of recent occurrence, is extremely attractive, and likely to become of considerable importance; a rich discovery having been made by the opening of a tunnel at the foot of a mountain range of limestone containing large deposits of lead ore. The precise locality is best known by the name of "Scotch Bank," but the mineral ground likewise extends over a portion of the Combs Valley, and is situated betwixt the famed Sallad Holes and Wren Park Mines. The discovery has been made within 7 fms. from surface, and a quantity of rich lead ore is already at grass, there being pieces weighing upwards of 3 cwts. The proprietors are few in number, but are eminently successful mine adventurers, and have named their mine the "Enterprise:" they have every confidence of its proving a fortunate one, and are preparing to prosecute their designs with vigour. They will have the facility of water-power for every useful purpose, and if present appearances are fully realised, they will surprise the natives of the Peak.

The Welsh Potosi Mining Company.—The operations of the company formed only a few months since for the purpose of effectually developing these extensive setts, are, we understand, proceeding with great activity, and with every probability of success, rich lead ore having been cut in three places in the shallow adit, worth respectively 8*l.*, 25*l.*, and 45*l.* per fathom, a considerable quantity of which is already at grass. These results, while they cannot be otherwise than satisfactory to the general body of shareholders, have fully confirmed the opinion expressed by the directors in recommending the undertaking to the public, as a promising and profitable investment. Such success, however, whatever may be said of the fluctuating character of mining adventure, will be readily traced, by those who have had experience in mining operations, to the sound judgment observed by the directors in the selection of practical and competent engineers to inspect the property, previous to the formation of the company, and to the subsequent employment of skilful operatives and trustworthy local agents—a most essential element in legitimate mining, and a guarantee for the security and judicious appropriation of the capital invested. Before a single share was allotted, we believe the directors took upon themselves the payment of the preliminary expenses of dialling, &c.; and it was not until after the most careful survey had been made, and they were satisfied of the promising character of the various lodes, that they ventured to call the attention of the public to the undertaking. The immense extent of mineral ground, and the magnitude and richness of the lodes—which are reported to be all champions, and to extend upwards of a mile in length—induced the directors to establish a company with ample resources, so as to afford them an opportunity of fully developing the property, and obtaining commensurate returns. The capital which they propose to raise is 100,000*l.*, in 20,000 shares, of 5*l.* each. It was determined, however, to issue 5000 shares only in the first instance; 2*l.* per share to be paid by way of deposit, and the further sum of 3*l.* when required so to do. The first issue of 5000 shares has already been applied for. The engine is forking the water, which, it is believed, will be down to the 10, 20, and 30 fms. in about a fortnight, when large returns are expected. We have always considered this mine (so well-known to have yielded immense returns from surface works) only required capital and judicious management to ensure large and profitable returns to the shareholders; and from a recent inspection of several massive specimens of ore, which may be seen at the company's offices in Gresham-street, we are more than ever convinced that there has been no error in judgment on the part of those whose enterprising spirit has led them to invest their capital in the undertaking.

The Carvath United Copper and Tin Mines.—A company is now being formed for working these mines, which have been abandoned for about half a century. They were opened in the year 1801, by some poor miners resident in the immediate neighbourhood, the only machinery employed being a very small water-wheel, which, after working two years, was found insufficient to keep the water out of the mines, and the expense of a steam-engine was in those days out of the question. In the year 1815, the late Capt. John Hitchens made a proposal to re-work them, and obtained a certified copy of the ores raised from that portion of the sett belonging to the Duchy of Cornwall. Capt. Hitchens's proposal, however, was never brought into operation, and the mines have continued unworked to the present day. These certificates are in the possession of Mr. Foulkes, the secretary to the undertaking, and show the ores raised from the Duchy land from the 18th June, 1801, to the 24th May, 1804, to amount to 540 tons 16 cwts., producing 8068*l.* 18*s.* 6*d.*, being an average of 14*l.* 14*s.* per ton, the average standard at that time being only 11*l.* Mr. Foulkes is also in possession of authentic documents, by which it appears that in the three months ending March, 1803, the average tribute was only 3*s.* 10*d.* in 1*l.*, and that about 12 tons, or more than one quarter part of the whole of the ores, was broken on tutwork, from the driving of the levels and winzes: and the ores for the three months ending June were raised at an average tribute of 4*s.* 9*d.* in 1*l.*, out of which 15 tons, or above one-third of the whole quantity, was obtained from tutwork in the same way. Stones of ore have been analysed, and show a produce respectively of 15¼, 21, and 50 per cent. for copper. The present promoters have succeeded in securing leases from the various proprietors for terms of twenty-one years, with one exception, which is for twenty years, embracing the whole of the lodes for about three-quarters of a mile in length, at dues from 1-15th to 1-18th. There are three known lodes; one from which the copper ore was taken has been worked to the 35, the other two are believed to have been cut in the adit level; and some old miners, who worked there when boys, report that both these lodes produced tin and copper of a rich quality. The property has been inspected and reported upon by Messrs. John Taylor and Sons, Mr. Francis Barratt, mining agent to the Earl of Mount Edgcumbe; Mr. Michell, mining agent to Lord Viscount Falmouth; Capts. J. Puckey, J. Lyle, P. Floyd, and J. Webb. Messrs. Taylor, in their report, stated that they were well acquainted with the ground comprising the sett, and entertain a favourable opinion of it. The character of the lode at the shallow depth was fully described to them by Capt. Remfry, and they believe it would be found valuable, if effectually worked. They also state that they formerly contemplated working the mine, but abandoned it only in consequence of difficulties they experienced in obtaining grants of the several properties necessary. The present adventure is divided into 6400 shares, of 3*l.* 2*s.* 6*d.* each, 2*l.* to be paid at once, 1*l.* on the 30th of June next, and 2*s.* 6*d.* when required. The lessees take up and pay upon 800 shares; and it is confidently expected that the whole of the shares in this very encouraging adventure will quickly be disposed of, without the necessity of an appeal to the public.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—Since the last report we have cut the north part of the lode in the 120, at Field's engine-shaft, it is from 2 ft. to 2½ ft. wide, orey; we expect in driving east a great improvement shortly. The lode in No. 1 winze, sinking under the 110, continues very good; the lode in the 110, east of this shaft, is worth for copper ore 70*l.* per fathom; the south lode in the same level is worth for copper ore 25*l.* per fathom; all the other parts of these mines are just the same as for some time past. The water-course for the engine is 7½ strokes per minutes. We are now making preparations to put a 7-inch lift to the 80 fm. level, which will be drawn by the new steam whim-engine, by this we think we shall be able to sink Field's engine-shaft 20 fms. deeper, and also to explore the eastern ground.—M. White: Feb. 6.

ANGARRACK CONSOLS.—Our setting took place on the mine on Friday last, when the end on silver lode was taken to drive at 2*l.* 10*s.* per fathom, the cross-cut north at 1*l.* 10*s.*, and the end on tin lode, east of Cold Harbour shaft, at 2*l.* 12*s.* 6*d.* The lode in the end on silver lode, is just the same as when last reported; the tin lode in the eastern end is 1 ft. 3 in. wide, composed of capel mundic, and tin; by continuing the cross-cut north we expect in about 12 fathoms to intersect a large copper lode.—J. Barratt: Feb. 8.

BALLYGONEEN.—The end in No. 3 level continues to improve. No. 4 level has greatly improved since my last—good orey ground, with a fine rib of lead in the end. In No. 5 level the lode is larger and better, opening good tribute ground. The dressing now proceeds regularly, and we have 10 tons more of lead ready to sample. —W. Griffiths: Feb. 6.

BEDFORD UNITED.—The new incline-shaft is sunk 13½ fms. below the 115 fm. level; the lode is not underlying so much as it did, and the shaft is now a little to the south of it; the ground is still hard and troublesome, but we expect to be down for a 130 fm. level by next setting-day, when we shall commence driving on the course of the lode. We know there is a fine course of ore before us eastward, and we have every reason to expect there is a good lode between the two cross-courses westward. In the 115 fm. level east we have been driving by the side of the lode for some time past, but are now cutting through the capels, and shall get into the main part of the lode in a few days; in driving west in this level the lode proves to be disordered, and is not at present profitably productive. In the eastern end, in the 103 fm. level, the lode is 2 ft. wide, saving work, but not rich. In the 90 fm. level we have a fine promising lode in the end; it is 3 ft. wide, yielding good work, and is likely to become very shortly much more productive and profitable. In the 80 fm. level the lode is 2 ft. wide, yielding good stones of ore, and has a very promising appearance. The winzes in the 103 and 90 fm. levels are being sunk by the side of the lode, and there is no alteration in the ground to notice. The tribute department is in a very healthy state, the pitches yielding good and regular supplies of ore for our samplings, and we expect from the produce to have a good sale on the 23d inst.—Feb. 6.

BIRCH ALLER.—The 40 fm. level has been driven 5 fms. 3 ft. north by four men, and the character of the ground is looking much the same as it has for the last 6 fms. or 7 fms., and the end is now in easy ground for driving. This level, south of engine-shaft, has been driven 4 fms. 4 ft. by six men, and is looking more promising than I have ever seen it before; it has a regular and well-defined wall, and a leader on it, composed of black jack, spotted with lead, antimony, and mundic. This end is also in easier ground for driving than it was, it being just leaving the foot, and consequently the influence of the hill. The winze below the 30 south has been sunk by two men, and there is a very promising lode in the bottom, producing about 8 cwts. of lead to the fathom; the stopes in the back of this level are looking capital, and they will turn out full 1 ton of lead to the fathom; the stopes are now more than 6 feet wide, and we have more lode to strip down yet. The end in this level has been driven 7 fms. 4 ft., and the features presented in it are as well as they can be expected without a branch of ore; the lode is from 18 in. to 2 ft. wide, composed of a pretty mundic, light killas, and sprigged with lead, but not a sufficient quantity to save; it is easy ground for driving—now set at 2*l.* 10*s.* per fathom; the shaft below this level has been sunk 2 fms. 2 ft. 6 in. by six men, and is now in good ground for sinking. The pile of stuff at the surface is producing good lead, and we have to-day drawn to the surface, from the stopes, a good pile of work, and on Monday we must increase the dressing pare. The engine, and all the machinery connected with the working of this mine, are performing their duties very satisfactorily.—G. R. Odgers: Feb. 4.

BLACK CRAIG.—The summpen have driven 5 fms. east of the shaft in the 52 fm. level—part of the end is the blackstone, and part a white rock, in which some small spots of lead are found. We have set to drive 2 fms. north through the north rider, to see if it produces lead in this direction. We have set most of the pitches again, and some of the tributers have good wages in their pitches.—R. Williams: Feb. 6.

BLAEN CAYLEN.—The lode in the forebreast is 1 ft. wide, composed principally of light killas, carbonate of lime, and sugary spar, looking more kindly than it has for some time past.—J. Frank: Feb. 6.

BORINGDON CONSOLS.—Since my last, the shaftmen have been busily engaged in cutting ground for cistern and bearers, in the 24 fm. level, for the 15 in. lift. In the 24 fm. level west the men are securing the level; going east, we are cross-cutting the lode; we have cut the capels of the lode, and hope to get through and see the lode in the course of another week. In the 12 fm. level east, the lode is from 4 to 5 ft. wide, composed of spar, flookan, mundic, and lead. The stopes are producing a fair quantity of work. We are getting on with our dressing as fast as possible, and intend sampling at the end of the month.—W. Godden: Feb. 9.

BRONFLOYD.—The deep adit west is set to two men, at 4*l.* 6*s.* per fathom; the number will be increased to four as soon as the fan is put up, which I expect will be done next week; the lode is composed of clay-slate, quartz, and small branches of silver-lead ore. The 10 fathom level west is producing good lead, which is saved for washing; the cross-cut in the 10 fathom level east is going through a powerful lode, composed of quartz, clay-slate, and a little lead. The tributers continue taking down the lode on the north side of the western level, which is worth 1 ton of lead to the fathom. I have set two men to take down the lode some 15 fms. further west; at present there is a little ore, and an immense quantity of carbonate of lime. The ore will be finished this week, and the tributers commence washing theirs the following one.—J. Frank: Feb. 6.

BRYNTAIL.—In the 12, east of engine-shaft, the ground is improved for driving; a portion of the south part of the lode is only being carried, therefore the value of the whole cannot be ascertained at present. The cross-cut in the 12 is driven on the lode 17 ft.; it still produces a small quantity of ore. We expect to reach the north wall in a day or two. The enlarging and securing of the deep adit is going on favourably, as well as all other work on the mine.—J. Roach: Feb. 9.

BUTTERDON.—The lode in the adit end driving south is 1 ft. wide, producing very good stones of lead ore, altogether of a very fine appearance.—J. Kemp.

CALSTOCK UNITED.—The shaft at the south mine, Varnish's, is complete, plat cut, &c., to the 30 fm. level; and in the next week, six men will be employed driving west on the lode in the 30, and resume the sinking of Varnish's shaft immediately. There is nothing materially new in the mundic pitches; but inasmuch as we have a good extent of tramroad communication at the deep adit to Varnish's, we can command almost any amount of mundic. The back of Varnish's, in the 20 fm. level, or rise, at this point has failed, the lode being in a very unsettled state, but it has every appearance of making a good lode for copper under. The mundic pitches, east and west of the adit cross-cut, as on the longitudinal section, are very productive, and ground cut out and drained to last for years, in the mundic department. Caroline's shaft will be sunk to the 52 in the next week, and the plat partially cut. We expect to sell 1 ton 10 cwts. of tin from this mine in the next week. The lode in Caroline's 42 east is 4 ft. wide, but no tin to value. We expect to put eight men in the end of the ground above the 42, at Caroline's, in the next setting, which will turn to some profit to the shareholders; and in this end of the ground east, we hope the chances of success are without doubt. The tutwork we purpose for the next setting is as follows:—Nine men at Varnish's shaft; six men in the 20 fm. level east, nine men at Caroline's shaft; six men to drive Varnish's 30 west on the lode, under the mundic pitches; two men to extend east on the tin lode in Caroline's 42 east; and two men to stope the back of the deep adit, and put down tramroad west of Hancock's shaft—34 men in all. The kilns, refining furnace, and machinery generally, are doing first rate. The arsenic for sale at the mine is about 500 casks, or 80 tons; the copper ore about 7 tons. On the whole, the prospects of the mine are improving, and by sinking, we consider the mine is, without doubt or hesitation, likely to make a profitable and lasting concern.—J. Kernick; W. Cooke: Feb. 4.

— We found the water in fork this morning in each shaft, and all in working order. Varnish's shaftmen have commenced sinking below the 30, and the six men lately in the back of the 20 are removed to extend the 30 west on the lode; this lode in the 30 will be developed as we extend west and open for a plat.—J. Kernick; W. Cooke: Feb. 6.

CEFN GWYN.—We have not as yet resumed the sinking of the engine-shaft, as the men are still engaged cutting ground for the whim round. The lode in the 20 fm. level, west of engine-shaft, is 5 ft. wide, composed principally of spar, mixed with clay-slate, and small branches of lead ore. In cutting the rock for the whim round we have discovered another lode, which is about 4 fms. further south than the new engine-shaft, running very near east and west; it is composed of spar, prian, with some good spots of ore in places. This lode can be intersected in the 20 fm. level (when the shaft reach that point) at a very little expense, and is likely, from its appearances, to much enhance the value of the mine.—S. Trevethan.

CLARA.—The engine-shaft is down 17 fms. from surface; we have nine men employed sinking of it, and are progressing satisfactorily. We are also cutting out a lobby and raising stone for the new wheel-pit, and shall shortly commence taking up the pitwork from the old mine, and fixing the same in the new engine-shaft.—S. Trevethan: Feb. 8.

CLIJAH AND WENTWORTH.—Julia Lode: Walter's shaft is sunk 16 fms. from surface; the lode is producing good stones of yellow ore—sinking by nine men, at 10*l.* per fathom. The 20 east is driven about 33 fms.; the lode in this end will yield about 2 tons of ore per fathom—driving by six men, at 7*l.* per fathom. The 30 east is driven from 11 fms. to 12 fms., and will turn out ½ ton of ore per fathom—driving by eight men, at 8*l.* per fathom; the stopes in the back of the 20, east of cross-cut, will turn out 1½ ton of ore per fathom—stoping by six men, at 3*l.* per fathom. Since our last report we have cut this lode in the 40; we have not yet cut through the lode, but from what we have seen, it looks very promising.—J. Cudlip: Feb. 4.

CLIVE.—In the deep adit level there is a little improvement; the lode is 6 in. wide saving work, and of moderate quality; the ground has also a more settled appearance and favourable for driving. At the patch we have commenced sinking the shaft, the lode in which is 3½ ft. wide, composed of a mixture of standstone and barytes, with good stones of ore. On Saturday I hope to send you the ground-plan and section of the mines.—Edward Rogers: Feb. 9.

CLOWANCE WOOD.—The adit level west of Slater's shaft, on Slater's lode, set to drive by four men, at 30*s.* per fm.; the lode in this end is 1¼ ft. wide, quartz, jack, mundic, and copper ore; driven in the past month 9 fms. 1 ft. The adit east of Jenkins's shaft, on south lode, set to drive by four men, 1 fm., at 60*s.*; the lode in this end is 3½ to 4 ft. wide, gossan, quartz, and stones of ore and mundic; driven in the past month 3 fms. 3 ft. 6 in.—J. Delbridge; E. Chegwin: Feb. 6.

COMBMARTIN CONSOLS.—We are progressing satisfactorily in sinking the shaft, there being no perceptible increase of water. The capel we have in the shaft contains beautiful specimens of quartz, similar in character to the samples found to be auriferous. We are engaged erecting the machinery, and hope to be able to complete it by the time it will be required. After so much unfavourable weather we hope for better, which will facilitate our progress.—T. Treweek: Feb. 8.

CONISTON UNITED.—In our north cross-cut we have just cut into the lode only a few inches, it is composed of barytes, spar, and sulphur, with spots of copper ore; in the course of a fortnight I hope to give more favourable particulars. In the south cross-cut we have hard ground (lime-stone), and about 15 or 16 fms. to cut the lode. I think we should be making preparations for sinking the shaft 10 fms. deeper, by fixing whim, &c., to go down as deep as possible next summer; this is a very im-

portant point, and one I believe that Capts. Ennor, Vivian, and others strongly recommended when here; as in a former working this lode made a fine branch of ore above the lime-stone, and when we were driven out by the water, we had got through the lime-stone (only a foot or two) into a more congenial stratum of soft ground, and much the same sort in which the ore made above, the lode worked far better, and produced some good stones of ore in the bottom of the shaft. In addition to this, we are at the junction of a large cross-course, and not far from an almost endless quantity of gossan stoping down the hill. I have sent to port about 6 tons of ore, the greater portion of which came from the shaft in the last 12 ft. or so in sinking, and when we left off was looking better than it had heretofore.—J. Boundy: Feb. 9.

CREETOWN.—In the 26 fm. level east the lode has again improved, being now 14 in. wide, with fine stones of lead for 2 ft. up the end. In the 26 fm. level west the lode is 6 in. wide, but unproductive at present. The lode in the 12 west is split, but on the north part there are good stones of copper. In the 12 east the lode is becoming larger, with spots of copper. The stopes west of the shaft, in the back of the 12, are looking well at present, yielding ¾ ton of copper per fm. The stopes in the back of No. 3 level, east of the shaft, are yielding some good stones of lead, and also copper. No change in any other part.—M. Woolcock: Feb. 7.

CUBERT UNITED.—The lode in the 55 fm. level west is worth about 3 cwts. of lead per fm.; in the east end it is worth 1 cwt. per fm. In the 45 end west the lode at present is small, with spots of lead in the flookan; the driving of the 45 fm. level east is suspended. The lode in the 35 end east is 12 in. wide, producing occasional stones of lead, and has a very healthy appearance indeed; the 35 end west is suspended for a time, and the men put to rise in the back of the same level on the most orey part of the lode. The lode in the winze in the bottom of the 25 fm. level east is at present unproductive.—A. Down; J. Trewin: Feb. 7.

CWM DARREN.—The lode in the engine-shaft is still looking very well, being a good mixture of ore for about 4 ft. wide, yielding about 1 ton of ore per fathom; we have 18 in. more to sink to finish the lift. The copper part of the lode in the 20 fm. level west is 18 in. wide, but rather poor at present. The lead part of the lode on the footwall has not yet been taken down. The lode in the stopes over this level is much the same as when last reported on. We have again commenced dressing.—Michael Barbery: Feb. 5.

DARREN.—The lode in the 10 fm. level, driving west of whim-shaft, is 8 ft. wide, with a very promising appearance, and yielding at present 2 tons of lead ore per fm.; we have six men driving this end, and four cutting a plat. As soon as this is completed the same men will commence driving east of shaft, where the lode is looking promising. The lode in the deep adit level west is 2 feet wide, but at present poor. The lode in Francis's level is 4 ft. wide, yielding about 10 cwts. of lead ore per fm. The stopes in this mine are much as usual, yielding about ½ ton per fathom each.—S. Trevethan: Feb. 8.

DEVON BULLER GREAT CONSOLS.—At our setting-day I set Emma's engine-shaft to 12 men, at 10*l.* 10s. per fm., for 2 fms. They have sunk in the past month 3 fms. 4 ft., making altogether 8 fms. 1 ft. from surface; the branches we have intersected are composed of gossan and spar; they all incline towards the lode, which I consider a favourable indication.—M. Stephens: Feb. 8.

DEVON CONSOLS NORTH.—On our last monthly setting day, I set the cross-cut to drive south towards the lode, at 9*l.* per fm., stented 2 fms. We have driven during the past week 5 ft. 6 in., and have now only between 3 and 4 fms., to reach the lode.—H. Williams.

DEVON UNITED.—The engine-shaft is down 3 fms. under the 52 fm. level; the lode here still continues its size and regularity, with spots of lead. We have made a communication from the 30 to the 40 fm. level this morning, but it will take the men a day or two to secure their ground. We continue to clear and secure the 20 fm. level south with all speed. We are also making a fair progress in clearing and securing the deep adit level north, towards the great copper lode; it is now made good 30 fms. from the engine-shaft. We are getting on with all our surface operations as fast as the nature of the work will admit. In the adit level we have discovered mundic in the bottom for a great space, say 70 fms. in length; lode worth about 3 tons per fm. In the back of the level it is gossan and mundic. In the 20 fm. level we have mundic laid open for about 50 fms. in length; lode worth about 3 tons per fm. In the 30 fm. level we have mundic discovered for 20 fms. in length; lode worth 4 tons per fm. In the 40 fm. level we have mundic discovered for about 15 fms. in length; lode worth about 4 tons per fm. In the 52 fm. level we have mundic discovered for 9 fms. in length; lode worth 3 tons per fm. According to promise, I have carefully made up the quantity of mundic laid open, say 5000 tons.—An. Bray.

DEVON WEST BEAM.—We are driving the cross-cut south, by six men and one labourer, to intersect the great copper lode and others, the ground being a little softer; the present price is 8*l.* 13s. per fathom. We shall lose no time in driving to intersect the above-named lodes with all possible speed, and we most strongly recommend to drive the cross-cut south, west of the whim-shaft, in the adit level, to intersect Brooks's lode. This lode has never been seen further west than the whim-shaft, and by driving a cross-cut 4 or 5 fms. further we shall intersect 30 fms. west of the shaft, and it has improved in going west nearer the granite. We are now stamping some tinwork which was broken from the 30, west of the whim-shaft, on the north lode, also from the 20, on Brooks's lode, and hope to have another parcel of tin in about three or four months' time.—M. Stephens; W. Hosking: Feb. 9.

DREWSTEIGNTON.—According to your request, we have examined the lodes discovered in the above mine, and beg to hand you the following:—We have discovered 11 lodes in the south adit, that was driven to unwater the lime quarry, all of which are very promising for making rich for minerals, we should say 10 or 15 fms. deeper than the present level. We have also four lodes in the north-west adit, which possesses the most favourable indications for working ore in depth. The south adit, before spoken of, is driven to the extent of 60 fathoms, by so doing it has intersected 11 lodes, as before stated, six of which are copper and lead lodes. No. 1 is about 2½ feet wide, composed of fluor-spar and mundic, with occasional spots of yellow copper ore. No. 2 is just the same appearance as No. 1; this lode is about 4 fms. south of No. 1, running east and west. No. 3 is 6 ft. wide, laying 7 fms. from No. 2; the appearance of this lode leads us to think that we shall find it productive for lead at a deeper level; as it is, only intersected to the depth of 5½ fms., it is composed of beautiful fluor-spar and prian, with a leader of flookan on the footwall 1½ ft. wide, running south-east and north-west, from which some good specimens of lead have been broken. No. 4 is about 3 fms. 1 ft. from No. 3; this lode is 6 ft. wide, just the same appearance as No. 3, running south-east and north-west. No. 5 is about 5 fms. from No. 4; this lode is 8 feet wide, precisely the same appearance as No. 4; from it good specimens of lead have been broken. No. 6 is about 2 fathoms 4 feet from No. 5; a north and south lode, about 4 feet wide, with just the same appearances as No. 5. From this lode different samples have been broken, and assayed by Mr. Mitchell, one of which produced 1270 ozs. 16 dwts. 16 grs. of fine silver to the ton, and 8 per cent. for lead; also another sample from the same lode, produced 761 ozs. 6 dwts. 16 grs., and 4½ per cent. for lead. No. 7 is about 7 fms. from No. 6, running east and west, lode 8 feet wide, with occasional stones of copper, very promising indeed; its component parts are gossan, spar, peach, and prian; it also produces copper greens, and the water that runs from it is much impregnated with copper. No. 8 is about 8 fms. from No. 7, a copper lode, about 3 feet wide, with a flookan on the south wall 1 foot wide, the north part is composed principally of white prian, with a leader of mundic 6 in. wide, with spots of copper ore, and intermixed. No. 3 is about 2 feet wide, and 11 fms. from No. 2; this lode is just the same in appearance as the last spoken of. No. 4 is about 5 fms. from No. 3, about 1½ foot wide, and precisely the same appearance as No. 3. We have no doubt but that several of these lodes will form a junction from 10 to 15 fms. under the present adit level. We think it advisable to go down in the valley at once and take up our deep adit, and drive it up with all possible dispatch, then we may reasonably expect a rich mine, from the appearance of the lodes in our present adit; and we hope to clear and secure our adit under the lime quarry in nine or ten days' time.—T. Moyle; T. Gidley: Feb. 6.

DUNSLEY WHEAL PHŒNIX.—The lode in the stopes produces good work for tin. We are getting on as fast as possible with the wheel-pit.—J. Spargo.

EAGLEBROOK.—The adit level will be communicated to the engine-shaft on Tuesday or Wednesday next, when we shall at once begin to cut a plat there, and I will afterwards write you as to the appearance and value of the lode. The water-wheel is completed, and we hope to have the masons at the wheel-pit sometime in the next week. I shall send on Friday next, as requested, four samples of gossan, quartz, and mundic, from different parts of the mine.—H. Francis: Feb. 4.

EAST GUNNIS LAKE.—In the 49 fathom level the lode in each end is 3 ft. wide producing good saving work; it has but a very slight underlay, and is composed principally of fluor-spar and quartz, with good indications of improvement taking place very shortly. In the western end, in the 36, the lode is 18 in. wide, and orey throughout; in the eastern end, same level, it is 3 ft. wide, yielding good stones of ore. We purpose driving the bottom ends a little further, and then to resume sinking the shaft. The western end in the 36 will also be extended until it is under Redwin's shaft; we shall then rise against it to unwater the 24, by doing so we shall be able to work a run of profitable ground to great advantage.—Feb. 6.

EAST WHEAL BEDFORD.—The lode in the 20 fm. level is still of the same size and character as last reported, in the west end 8 in. wide, very good work for tin; east, in the 20 the lode is getting harder, more like the stuff in the 10; probably by the end of the month we shall get under the junction, as we had in the 10 a much larger lode and more tin. The stamps we have on the mine can be attached to the wheel for a trifling expense, and it will be necessary for us to put up a whim, which will answer the purpose for the next 20 fms. Sinking this, of course, will be a much less outlay for the present than a drawing machine; however, it is absolutely necessary one or the other should be erected to facilitate the operations.—Jas. Carpenter.

EAST WHEAL RUSSELL.—The lode in the 55 fm. level is still producing stones of ore. There in no improvement in any other part of the mine since last reported.—W. Wetherell.

EAST WHITE GRIT.—The men are driving satisfactorily in the 40 fm. level, and I expect they will very shortly be in solid ground. In the winze sinking under the 20 fm. level we have no change.—R. P. Edelsten.

EXMOOR ELIZA.—The lode in the 50 still maintains its size and character; and operations are being carried on with spirit in every part of the mine, as last advised.—W. Dunstan: Feb. 8.

GAWTON UNITED.—In the 24 west the lode is 2½ ft. wide, producing good stones of ore; in the 24 east the lode is 20 in. wide, producing good stones of ore; both these ends are looking very promising. In the 10 east but little has been done since last report, in consequence of a run. In the deep adit the lode produces saving work for copper ore. The part of the lode driving on in the shallow adit is 6 ft. wide, composed of peach, spar, mundic, and stones of black and grey ore.—H. Horswill: Feb. 8.

GORN LEAD.—I find in going forward with the adit end, whenever a branch comes into the lode from the north it disorders the lode altogether, but that as soon as a branch comes from the south the lode makes ore. We have had a great many branches from the north, and of late we had one that caused a very unfavourable channel of ground. At present we have a branch from the south, with a stream of water. The lode looks very promising, with a branch of ore in bottom of the end on the south side; the lode is 4½ feet wide. Delane's cross-cut is just the same as last reported.—R. Maynard: Feb. 4.

GREAT CAMBRIAN MINING AND QUARRYING COMPANY.—The contractors for the machinery of this company (Messrs. Thomas and De Winton, of Carnarvon), have reported to the directors that they have delivered, and are now in course of erecting, on the company's estate at Maestryfar, near Dolgelly, the large water-wheel, and other machinery for this company; and they are in hopes that the same will be completed by the end of this month, should the weather continue fine.

GREAT CRINNIS.—I expect to put the flat-rods to work on Thursday next. Our tribute pitches continue to look well, especially for silver ore: we are getting some quantity of silver ore, also, from the stopes at the 24 fm. level, Cornish's shaft. The operations and prospects generally are very satisfactory. Our engine is keeping off the water from the 80 fm. level with from 7 to 9 feet strokes per minute (17 in. lift); this is about the extent of the water during the winter months. It is satisfactory to find our pumping power sufficient to a much greater extent.—J. Webb: Feb. 6.

GREAT ONSLOW CONSOLS.—The sinking of No. 1 winze below the 45, west of Bennett's shaft, is suspended for a short time, owing to an increase of water. The ground in No. 2 winze, below the said level, is much the same as last reported. The stopes over the 60, west of engine-shaft, are yielding 1 ton of ore per fm.; there is no material change in the ends in this level. Bennett's shaft is sunk 8 fms. below the 60, and is in due course of progression. The engine-shaft is yielding some good stones of ore from branches of the lode in the country. All other operations are progressing favourably.—G. Rickard: Feb. 8.

GREAT TREGUNE CONSOLS.—We have completed the shallow level to the shaft on the new tin lode, and shall commence sinking with all speed. At Carkee's we are clearing up the shaft, and cutting ground for plat, as stated in my last.—J. Spargo.

GREAT WHEAL BADDERN.—The lode in the 20, east from the new shaft, is 9 in. wide, producing some stones of lead. The lode in the 30 is unproductive at present. The lode in the 40 east is 1½ ft. wide, turning out some good work for lead; but we have not been able to do much here for the past week, in consequence of the water being in. The stopes in the bottom of the 30, and the tribute pitches generally, are looking well. We shall finish heaving up our bottom lift to-day, and shall proceed with the top one as fast as possible, and the engine will be ready to work quite in time for the pitwork. We intend sampling lead ore again some time next week, and expect to have about the same quantity as we sampled last.—J. Rogers: Feb. 7.

GWAYNLLIFION LEAD.—Shallow Adit: In the sink we have not seen much of the bottom during the past week, as we have been busy cutting the ends down ready for another stope; the ground is without alteration in the other parts of the mine. The deep adit still continues in very hard ground, worth 10*l.* per fm.; but I expect we shall soon be through this hard bar of ground.—H. Rawson: Feb. 8.

HAWKMOOR.—In the 30 east the lode is increasing in size, producing good ore from branches against the south wall. The water is drained just to the bottom of the end, and has a very promising appearance. At the old miner's shaft the lode is about 2 ft. wide, producing good saving work. At Graham's shaft the lode is very irregular, but without any material alteration as to value for copper; the water is increasing. We shall require a larger lift from the 30 to the 40, and sink with our present sinking lift to the 50. In the 30 west the lode is 3 feet wide, composed of mundic, fluor-spar, peach, &c; on the whole kindly, but not much copper to value. The stopes in back of the 20 have improved in the last week.—Feb. 5.

HENNOCK.—I beg to hand you the following report of our monthly setting on Saturday last:—The 60, south from engine-shaft, is set to four men, at 2*l.* 15s. per fm., stented 6 fms., by the side of the lode. The 60 north is set to four men, at 2*l.* 15s. per fm., stented 6 fms. The 30 south is driving by three men, in easy ground, at 2*l.* 10s. per fm.; there are several branches in this end, composed of brown and black jack, with soft mundic and spots of lead. I am of opinion there is more lode standing to the east from the increase of water that has been met with this last week in driving, this we shall prove in the course of driving; the killas is highly mineralised. The lode is not yet cut through in the adit level, south from south whim-shaft, being cut into about 5 ft., showing some sprigs of lead in the gossan; this is set to two men to cut through, at 5*l.* 10s. per fm. We intend to put up a rise from the 40 to the 30 for ventilation, as well as to prove the lode; we shall commence in a day or two in easy ground. The ground throughout the mine is improved for exploring.—H. Rickard.

HILL BRIDGE CONSOLS.—We are still stoping at Ashley's shaft, and breaking fair work for the stamps, which are now at work.—J. Spargo.

HINGSTON DOWN CONSOLS.—No important alteration has taken place in our underground operations since last reported on, and we are glad to say that the engineers are getting on very satisfactorily with the erection of the new engine. The carpenters are busily employed in their departments, so as to complete the same in the time calculated on.—W. Richards; W. Rosewall: Feb. 8.

HOPE VALLEY.—The lode in the 35 fm. level, driving south, is 2 ft. 6 in. wide, a mixture of capel and spar, spotted with lead ore; the stopes in the back of this level will yield 9 cwts. of lead ore per fm. The lode in the winze sinking below the 23 fm. level is 2 ft. wide, and will produce 10 cwts. of lead ore per fm.: the lode in the 23 fm. level, driving south, on the eastern part, is 3 ft. wide, and will yield 6 cwts. of lead ore per fm. We have this day commenced cutting ground to hang tackle, &c., preparatory to sinking winze on the western part of the lode in the 23 fm. level. The lode in the stopes in the back of this level will produce on an average 11 cwts. of lead ore per fm. The lode in the 11 fm. level, driving south, is unproductive; the the lode in the same level, driving west, is 3 ft. wide, and will produce 18 cwts. of lead ore per fm. The stopes in the bottom of the 11 fm. level will produce 15 cwts. of lead ore per fm.—W. Barratt: Feb. 8.

IRISH CONSOLS.—I am glad to inform you that there is an improvement in the ground at the trial shaft, and should it continue, much greater progress will be made, and the lode sooner seen than was anticipated. The plat at the adit level, near surface shaft, will be completed in a few days, being set to six men to finish for 8*l.* The moment the plat is cut, the shaft will be resumed sinking below the adit level, and the level pushed westward from the shaft on the course of the lode. The cross-cut, south from Collera's adit, is set 6 ft. to three miners and three labourers at 5*l.* From the nature of the ground in this end I am strongly of opinion that we are near another lode. All the works are being pushed on as fast as their nature will admit of.—Henry Thomas: Feb. 7.

KESWICK.—At Brandley, the drifts north and south on the lode in the 30 cross-cut have been commenced, and will yield 15 cwts. to the fm. each; the ground is hard, but very promising, as we expected from the nature of the ground in the 20 fm. level. At Stoneycroft, there is considerable improvement in the rise, which will now yield 15 cwts. of ore to the fm. The 20 fm. level north is also improved, and will yield 3 cwts. of ore to the fm. The lode in Wilkinson's level is worth 10 cwts.; middle level rise, 6 cwts.; and middle level stope, 15 cwts. of ore per fm. At Thornthwaite, the lode in the 37 fm. level is worth 10 cwts., and in the 27 fm. level, 20 cwts. of ore per fm.—R. B. Shepherd: Feb. 4.

LAMERTON UNITED.—The lode in the adit level is just as reported in my last, being a kindly lode, composed of spar, mundic, prian, &c., with spots of yellow copper ore. The lode in Royal Stuart shaft is just as reported in my last. We have completed the dividing down our engine-shaft, and nearly completed our top leat to wheel-pit. The wheel-pit also is going on rapidly, and I hope to see it completed in another fortnight, when the wheel will be pushed on with all speed. We are preparing for the bobs, pulleys, stands, &c., as fast as possible. I should have said, also, that the dividing down the shaft being completed, there will be nothing to prevent the men from pushing on with the sinking shaft.—John Luke.

LANGFORD AND BARING.—The prospects at Langford are much the same as last reported. At Wheal Baring we have opened on the lode in different pits, and it presents a favourable appearance, composed of gossan, spar, and capels, from 18 in. to 2 ft. wide. I made an assay of some gossan in the different pits yesterday, which gave a produce of about 12 ozs. of silver to the ton.—W. Knott: Feb. 8.

LEEDS TOWN CONSOLS.—The engine-shaft is down 9 fms. 1 ft. below the 10 fm. level—ground the same as last reported. We intend sinking the shaft 10 fms. 3 ft. for a fork before we commence driving to cut the lode, having to sink 8 ft., cut a plat, and case the shaft, to bring the kibble to the bottom. About four weeks' time will enable us to drive the cross-cut. The flat-rod shaft is down 7 fms. 3 ft., ground harder than I expected. The 10 fm. level west is driven 15 fms., the lode is 3 ft. wide, looking very promising; the 10 fm. level east is driven 17 fms. from the engine-shaft, the lode is 2 ft. wide, which, I am happy to say, has improved—it will now pay for returning. The lode in the adit level west has a very beautiful appearance, though from causes mentioned in my last it is poor for tin; the lode has increased in width to 4 ft.—it is driven 30 fms. from engine-shaft. I have suspended driving the adit level east, and have put the men instead to clear a shaft on Binner Wood lode, to see if the water is sinking in the old mine through the working of the flat-rods, as the shaft there is 17 fms. below the adit level.—P. Pascoe: Feb. 7.

LEWIS.—The north lode, in the 80 fm. level, east from Praed's shaft, is 1 foot wide, with occasional stones of tin. This lode, in the 70, is 1¼ foot wide, producing low-price stamping work. The south lode in the 40, west from Oak shaft, where we have laid open some low-price tribute ground, is become poor, and as it is only a few fathoms from the boundary of the sett, it is suspended. On Sunday, the 29th Jan., the receiver of the pumping-engine broke, which caused several hours' delay, and in consequence of this the men were not able to resume their places of work in the 90 fm. level before Saturday last; notwithstanding this, we shall sample 18 or 19 tons of tin ores at the usual time.—M. Reed: Feb. 6.

LOVEDEN UNITED.—The lode in the 10, east of engine-shaft, is 5 ft. wide, composed principally of spar, with a mixture of blende and lead ore, yielding of the latter 10 cwts. per fm. The winze sinking under the adit level, east of shaft, is in a lode 2 ft. wide, and much improved since last reported, now yielding 1 ton of lead ore per fm. The stope in Mr. Davies's land, back of adit level, is getting out of the ore ground, and we shall have to suspend the working of it on Saturday next. The other stope is much as usual, yielding 10 cwts of lead ore per fm. The lode in Pen-y-bank shaft is 5 feet wide, still looking very well, yielding about 2 tons of lead ore per fathom.—S. Trevethan: Feb. 8.

LUDGVAN LEASE.—I have cleared up the shaft, and the lode is 3 ft. wide, producing a good quantity of tinstuff, and very rich, with very little underlay, making two smooth walls—a very promising lode, and very good ground for sinking a shaft.—Thomas Wallis: Feb. 8.

MOLLAND.—The lode in the 62 east is 2½ ft. wide, producing saving work; the lode standing in the back for the last 3 or 4 fathoms behind the end will turn out full 1 ton of ore per fathom. In the 52 east the lode is 2 ft. wide, producing good stones of ore, and appears to be opening wider, and showing indications of improvement; the stopes in the back of this level are at present rather poor; should they not improve in the course of a week or two, I intend to put the men to stope the back nearer the end, where the lode will turn out more than where they are now stoping. The stopes in the back of the 42 east will produce from 1 to 1½ ton of good quality ore per fathom.—T. Bennetts: Feb. 7.

MOUNTS BAY CONSOLS.—The engine-shaft is being sunk 4 feet, ground more favourable for sinking. The cross-cut driving north is being driven 3½ ft., and south 3 ft.; the ground in both these ends is gradually improving for the better.—James Richards: Feb. 8.

NANTEOS AND PENRHIW.—Our setting-day was on Saturday. The Ystumtean deep adit level east, by six men, 4 fms. or the month, at 6*l.* 10s. per fm. The 46 fm. level, east of Penhriw engine-shaft, by six men, 4 fms. or the month, at 5*l.* per fm.; lode 2 ft. wide, yielding about 2 cwts. of ore per fm. The 46 fm. level west, by six men, 4 fms. or the month, at 5*l.* per fm.; lode yielding 4 cwts. of ore per fathom. The 36 fm. level, east of Penhriw shaft, by four men, 4 fms. or the month, at 4*l.* 10s. per fathom; lode 4 ft. wide, with a very promising appearance, and will on an average yield from 16 to 20 cwts. of ore per fm. To rise and stope in the back of this level, 17 fms. east of shaft, by four men, 8 fms. or the month, at 1*l.* 15s. per fathom; the lode at present is not looking quite as well as near the level, but we expect it will soon improve. At Taylor's, the water is not yet in fork to the 46, therefore we did not offer the bargains under water. The winze below the 30 fathom level, west of Taylor's, remains unset, at 7*l.* 10s. per fm.; lode 4 feet wide, producing occasional stones of lead, but not sufficient to set a value on. We expect the water at Taylor's will be in fork in the course of four or five days, when we will set the 50 cross-cut, and the 46 fm. level west.—Michael Barbery: Feb. 6.

NORBURY.—A portion of machinery for the engine has arrived.—R. P. Edelsten.

NORTH WHEAL BASSET.—In the 102 fm. level, driving west of the new shaft, the lode is 2 ft. wide, producing a ton of ore per fathom, worth 8*l.* per ton. At the new shaft, sinking below the 102 fm. level, no lode has been taken down during the past week. In the 92 fm. level, driving east of the new shaft, the lode is 2 ft. wide, worth 10*l.* per fathom. In the winze sinking below the 92 fm. level, the lode is 3 ft. wide, worth 20*l.* per fathom. In the 52 fm. level, driving west of Lyle's shaft, no lode has been taken down during the past week.—T. Glanville: Feb. 4.

NORTH WHEAL ROBERT.—The general prospects of the mine are just as last reported—they are progressing favourably. We are at present very busy putting in our railway from the shaft to the dressing-floors; also for better convenience for putting the stuff over the burrow, which will do away with that drudgery—the wheelbarrow, and effect a great saving.—A. Pryor: Feb. 7.

NORTH DOWNS.—The 100, east of west shaft, has not yet been resumed driving. We have placed the men for the present to sink in the bottom of the 90, 20 fms. east of the bottom stopes—not only to prove the dip of the ore, but to guide us in driving deeper levels, and thus save time, expense, &c., in developing the lode eastward, in or under the dyke in the hill, as represented in my section of the ground in your offices. The lode in the 90 east is 20 in. wide, with two well-defined walls, consisting mostly of quartz, mundic, and stones of ore. The pitches are at present yielding a fair quantity of ore, and the tributers, working at 3s., 4s., and 6s. 8d. in 1*l.*, are earning wages. There is no alteration in the 70 cross-cut, and the lode in the eastern North Downs is being taken down, and we shall examine it on Monday next.—J. Prince.

OLD TREWETHER CONSOLIDATED MINING COMPANY.—We have fixed the bearers and cistern in the 10, below the adit, and have been cutting hitches for the dividings, and making every preparation for fixing the standing lift, which we shall do to-morrow, when we shall drop to the bottom. We have drawn the water out of the old sink in the 10, and have been clearing the attle and mud; we find a great deal of orey ground, and doubtless we shall raise a large quantity of ore from this level; we have to-day put two men to stope on ore. We also discovered in the back of the 10 branches of antimony, which will, from present appearance, pay well for working, and by following the branches a short distance we expect to meet with a large bunch of ore, it being similar here to where the large branches of ore were discovered in former workings. We have some rich ore at grass, and many tons more would have been to surface could we have got the whim to work, but we were afraid of injuring the lift, and the men were much exposed to danger in cutting the plat for cistern, &c.; as soon as we have fixed this lift, and the whim goes to work, we shall resume raising ore in large quantities. We have also discovered a branch of antimony north of the engine-shaft; this we cannot as yet say much about, before we clear the attle and ore, which we shall do as soon as possible. The whim is complete, and the poppet heads are up; we are now waiting for the pullies from the foundry. We are making the large pool for the supply of the engine and for dressing purposes. The engine still does her duty well, her consumption at present being only from 4 to 5 cwts. of coal in 24 hours. We have to-day set two men to drive the Wheal Thomas adit, and have commenced driving the old adit at Rose Mine, in the eastern part of the sett. We have also engaged some men to work the deep adit at Wheal Rose. Everything besides still goes on well.—R. Verran; S. Keast: Feb. 7.

PEAK UNITED.—The committee of management attended these mines on Wednesday last, and on inspection of the various workings, were fully satisfied with their improved condition, and ordered a continued onward progress to be made in the levels, in order to open out as much ground as possible, to afford a constant use for steam-power intended to be applied, as soon as occasion fully requires, for crushing; four additional men to stope were ordered for the present in the Newburgh level, being sufficient to produce as much additional ore as the present apparatus and floors can accommodate.—R. Bentley.

PEMBROKE AND EAST CRINNIS.—In the 80 west, in Pembroke, at Hoppe's shaft, the lode is worth 6*l.* per fm. The 80, east on this lode, will produce 5*l.* worth of ore per fathom. In the 110 the lode is small and poor at present.—East Crinnis: In the 112 west the lode will produce 12*l.* worth of ore per fm. The 90, east of Gill's, is also worth 12*l.* per fm. The 40 east, on Thomas's south lode, is worth about 5*l.* per fm.—Reid's Shaft: In the 80 west the lode is worth at least 50*l.* per fm. The winze sinking under the 70 is producing 20*l.* worth of ore per fathom. In the 40, north of Clark's, the lode in the west end is small; the east end, on this lode, is producing 14*l.* worth of ore per fm. In the 50, east of Hunter's, the lode is worth 6*l.* per fm.—John Lyle: Feb. 7.

PENDARVES AND ST. AUBYN CONSOLS.—In the cross-cut in the 44 fm. level, driving north and south from the engine-shaft, we are progressing favourably. We calculate on intersecting the main lode in the north cross-cut in about six weeks or two months. In the 32 fm. level east the lode is about 3 ft. wide, kindly, and producing both copper and tin; in the corresponding level west the lode is about the same size, producing a small quantity of tin. We have suspended the 22 fm. level east for the present, the men being engaged in rising to hole the 12 fm. level; the lode in the rise is worth about 12*l.* per fm. In the 12 fm. level east the lode is 3 feet wide, worth about 5*l.* per fm. for tin and copper. In the deep adit east the lode is about 2 ft. wide, worth about 6*l.* per fm. for copper. At Halgarrack, the lode in the adit end east is about 1½ ft. wide, kindly, producing good stones of copper and tin. The tribute department continues to improve slowly. We hope to sample on Wednesday, the 15th inst., about 15 tons of good copper ore.—J. Vivian: Feb. 4.

PENHALE CONSOLS.—The engine-shaft is down 2 fms. below the 74 fm. level; ground hard, lode 2 feet wide, producing 5 cwts. of ore per fathom. In the 74 north, ground moderate, lode 2 ft. wide, producing 5 cwts. of ore per fm.; in the same level south, ground moderate, lode 20 in. wide producing 6 cwts. of ore per fathom; driving south, on the east part of the lode, ground hard, lode 1 foot wide, but poor for ore. The cross-cut driving east, in the 48 fm. level, has not as yet intersected the lode; we have 4 fms. further to drive. Morcom's shaft is now down about 6 fms. below the 70 fm. level, ground favourable, lode 2 feet wide; there is a cross-course in the bottom of the shaft, which has disordered the lode, at present producing 4 cwts. of ore per fathom. In the 70 fm. level, driving south, ground good, lode 14 in. wide, producing 11 cwts. of ore per fathom; in the same level north, ground good, lode 1 ft. wide, producing 3 cwts. of ore per fathom. Gurney's shaft, in the 56 fm. level south, ground good, lode 20 in. wide, producing 3 cwts. of ore per fathom. Our setting on Saturday last went off satisfactorily; we set four new pitches, varying from 21.7s. to 4*l.* 5s. per ton. We sold on Friday last 50 tons of ore to Messrs. R. Mitchell and Son, at 15*l.* 12s. 6d, delivered on the mine.—R. Morcom: Feb. 6.

PENHAUGER.—The lode in the adit end driving north is 1½ foot wide, composed of fine gossan and excellent stones of lead ore.—J. Kemp.

PENLLYNE COURT.—The pillars for the engine are erected, and we are putting it upon its bed to-day. I could have it at work next week, if the castings had been supplied as promised.—J. Griffiths: Feb. 4.

PENMAEN GOLD (Merioneth).—The mine has greatly improved since my last, especially the Woodland lode, which is turning out an enormous quantity of the most beautiful quartz, full of pyrites. Francis's lode is much the same as when I last wrote; here we have a great pile of quartz ready for the reduction machine. Our smithy is progressing, and the foundation for the engine, &c., is nearly completed.—R. Owen.

PENPOMPREN.—The lode in the whim-shaft is 3 ft. wide, composed principally of gossan, mixed with clay-slate and blende, and some small branches of lead ore, but not so good as last reported. We have suspended the driving of the end, and have placed the men to rise in the back of the level against the shaft. The lode in this place is 4 ft. wide, with a mixture of ore throughout, all saving work for dressing. We expect to communicate this rise to the shaft in three or four weeks from this time, when we shall again resume the driving of the end, where the lode has a very good appearance, and shall also sink the shaft under the deep level.—S. Trevethan: Feb. 8.

PENZANCE CONSOLS.—I have inspected the Penzance Consols Mine to-day. I find but very little alteration since my last report. The 24, east of engine-shaft, is still producing some good stones of tin. I intend at our next setting to set a pitch over the back of this level, to prove this ground more effectually. The 24, west of engine-shaft, is also producing good stones of tin; we are opening some good tin ground here, and we shall be able to set a pitch in the back of this level next month. The 15 is still in tin ground, and I think we shall open from 3 to 4 fms. in this level this month, which will enable us to set a pitch here also at our next survey. You see we are opening as fast as we can in the ends now driving, but we have three ends more, which ought to be driven without delay. The first is a cross-cut in the 24 to cut the north branches, which have not been seen in that level; the second is to drive a cross-cut in the 30 to cut the south branches, which have not been seen in that level and the third is to drive the 24 on the red lode to cut the Old Hall lode, and also the north and south branches to the west of the flat lode, which is an entire new piece of ground, and where I think it is likely these lodes will produce tin at the intersection. The new shaft, of which I informed you some time since, I consider to be of great importance to the mine and ought to be sunk as soon as possible.—N. Tredinnick.

PERRAN CONSOLS.—The 40 fm. level is being driven west 10 ft., and east 9 ft.; the lode in these ends is much the same as last reported; west on the south lode we have driven 2 fathoms, yielding good stones of tin. The cross-cut north is driven 6 feet. The 30 fathom level west is driven 2 fms., lode 1½ foot wide, yielding good stones of tin; ditto east is being driven 5 ft., ground much the same as last reported. The tribute pitches are yielding a fair quantity of copper and tin.—James Richards; Francis Gundry: Feb. 8.

PERRAN UNITED.—We have been able to examine the lode 5 fms. below the 70, called Coombe's lode, which we think likely to be very productive in this level and below. In the 70 west the lode at present is not looking so rich, but has every appearance of improving; the east end in this level is much improved; in the cross-cut north at this level we have intersected some good branches of ore. In the 50 west, on the north lode, the appearance is of a promising character, with good stones of ore. In the 40 west, on the same lode, we have cut some good bunches of ore, and there is every appearance of an improvement in the lode. We have ceased and divided the engine-shaft to the 70, and the footways to this level will be permanently fixed in two or three days. The steam-whim has been working, one run of stands being completed to the engine-shaft, and we have drawn by the same from the 70. We have dislodged some of the timber in the engine-shaft, which prevented the lift going down, and we hope to be able to report in our next that we have cleared sufficiently to enable us to drop the lift below the 80. We may add that the mine throughout is looking well. The result of our setting for our tutwork and tribute pitches we will forward you.—J. G. Wilson; P. Clymo: Feb. 4.

POLTIMORE.—We have now forked the shaft dry, and again commenced to draw from the 40 fm. level. Capt. Floyd has discovered another level in the 20, running in a north-western direction, and has crept 70 fathoms on the course of a lode, which he believes is distinct from any other seen on the sett; the lode in this level is about 2 ft. wide. The stopes are yielding the same quantity of gossan as stated in my two last reports, and the quality is equally good.—E. Maunder: Feb. 7.

PONTERWYD.—The north lode in the 22 fm. level, at the western engine-shaft, is intersected by the cross-cut north, which is now cut into about 6 ft., but as yet not quite gone through, but from the appearance of the ground I think it is nearly so; the lode at this point, I am sorry to say, is not so good as might have been fairly expected, from the character of the lode in the adit level, where it is large, and produced good stones of lead ore. The lode in the 22 fm. level, where it is now intersected, is principally composed of blende, spar, prian, carbonate of lime, and clay-slate, with small particles of ore, and a great quantity of water still coming out of the lode; I still think that we shall not have to extend many fathoms on the course of the lode east and west before we get into some good ore ground, as there is a good lode gone down in the bottom of the adit level for full 8 fms. long; this lode must make ore when well laid open. We have now put the men to drive east and west of cross-cut on the course of the lode, to open each way on it as quickly as possible; this level is set to six men to each end, at 6*l.* per fm. The south lode is not as yet intersected, but we have of late crossed several small strings, which contained lead ore; this cross-cut is set to six men, at 8*l.* per fm. The middle engine-shaft is now down about 5 fms. below the adit level, which is in a good course of sinking; this shaft is offered to nine men to-day, at 12*l.* per fm., but refused; no doubt we shall get plenty of parties on Monday to take it, which I consider is a fair price. The lode in the shallow adit level, driving west, on the eastern part of the mine, is still composed of spar, blende, and clay-slate, with a very promising appearance; this level is set to four men, at 4*l.* 10s. per fm., and is rapidly approaching the eastern shaft, where the large orey lode is to be seen at surface. We shall commence to remove the machinery from the Bog Mine as soon as the water is in fork, in order to take up the lifts, &c., when the line of rods will be applied to the middle engine-shaft. I shall write you again in a day or two.—J. Paull.

RINSEY UNITED.—In our mine during the past week there has been no material alteration. The cross-cut and western adit are much the same as when last reported. In No. 1 winze the lode is 18 in. wide, producing saving work for tin, as you will see by the sample I sent to you for trial; it seems to improve in going down, and this I take to be of great importance—in fact, there is nothing wanting but the engine and a small capital to place us on the list of dividend mines, for the country is so highly mineralised. It is in the opinion of competent miners the best speculation in the locality. Capt. John Truran, of Ding Dong Mines, speaks very highly of this sett;

he was formerly agent at Trewavas Old Mine, and has surveyed our ground several times. I have been through No. 1, or eastern shaft, on Rinsey lode; this I find to be perpendicular about 15 fms. from surface, and 8 ft. long by 5½ ft. wide; under this it is diagonally sunk on the flookan, or cross-course to adit. I leave it to you to say what is to be done, and whether we are to cut down the remaining part at once or not.—W. Bennetts: Feb. 3.

QUINTRELL DOWNS.—We have now driven about 19 fathoms from No. 2 lode, through a soft whitish channel of ground; we have cut through several branches of soft quartz and gossan; we have now in the end a bed of soft white flookan, and in consequence of the heavy rains we have recently had, it is very wet; we are obliged to timber it very strongly. I think from the cross branches, and the change in the ground, we are near another lode.—T. B. Champion: Feb. 7.

RITTON CASTLE.—The carpenters will have finished erecting pit head, &c., by Thursday next, when we shall be able to resume working.—R. P. Edelsten.

RORRINGTON.—I beg to inform you that after having driven about 7 fms. north on shallow level from south part of north lode towards north part of same, we have now cut into it 2 feet, but have not yet reached the north wall; the lode is very loose, composed of carbonate of barytes, decomposed matter, and spotted with lead ore. We shall be able to give you more particulars in a future report.—John Taylor: Feb. 7.

— The cross-cut in the deep adit level, driving towards Watson's engine-shaft, is now in from the south lode 4½ fms.; in this level, driving east on the south lode, the ground is somewhat harder, and the lode in a disordered state. Watson's engine-shaft is progressing favourably. The middle level, driving east on the north lode, is 1½ ft. wide, composed of carbonate of barytes interspersed with lead ore. The branch driving east in this level is 1½ ft. wide, composed of spar and decomposed manganese. The south lode, in the same level driving east, is 2 ft. wide, producing occasional stones of lead ore. Watson's lode, driving east in this level, is 2 ft. wide, with two well-defined walls, and of a promising description. Taylor's lode, in the shallow level driving east, is 2 ft. wide, yielding good stones of lead ore—a very promising end. The stopes in back of this level are yielding saving work for lead ore, ground easy for stoping. We have cut the north part of the north lode in the shallow level, which is 3 ft. wide, a mixture of spar and decomposed matter, spotted with lead ore, having a very promising appearance, and likely to be productive as soon as it reaches the junction with Taylor's lode, which we anticipate to be about 10 fms. east of this point. The boiler makers are busily engaged in putting the boiler together, and most of the castings are on the mine, and if the weather proves favourable, it will not be long before the engine will be ready to start.—W. Barratt; J. Taylor: Feb. 9.

ROYAL HIBERNIAN.—Clogher Mine: in the 20 fm. level, driving east in Giles's shaft, has improved this last week. We have some good ore coming from the end; and I think by the appearance it will soon be better still. The men have driven here this week 4 ft. In the 20 fm. level west the lode is looking promising for lead; the men have driven in this level 4 ft. this week.—J. Kessell: Jan. 7.

SILVER BROOK.—The ground in the 11 fm. level, driving south, is a little softer, and the lode yielding more lead than when last reported on; we have about 2 fms. further to drive to get under the whim-shaft; when this is done we shall rise and hole the shaft, which we hope to do by the end of this or the beginning of next month. The lode in the 22, driving south, is not looking so well; yet we have still a good branch of lead about 4 in. wide, and the ground favourable. We are getting on well with sinking the engine-shaft, which is now about 3 fms. 1 ft. below the 22; the lode here still produces good stones of lead, with much more spar and jack, altogether looking very promising of soon having a bunch of lead. We are now engaged in fixing the standing-lift, &c. from the 11 to the 22 fm. level. We will write more fully in our next.—M. Stephens; W. Hosking: Feb. 9.

SORTRIDGE CONSOLS.—We have sunk our eastern shaft since last week about 1 fm. 2 ft. through a good piece of orey ground; the lode is about 4 ft. wide, with a splendid foot and hanging wall; the water is nearly all gone since the dry weather came in. Our western shaft is about 8 fms. 2 ft. deep; the lode is 7 ft. wide. We broke this morning from this shaft some very good stones of ore. I never saw it look better than at the present time. I shall proceed at once and get a whim for the eastern shaft. We have commenced to make a road for bringing the materials on the mine.—James Metherell: Feb. 9.

SOUTH CRENVER.—Carne's shaft is set to cut down and make complete to the 64. The 74 fm. level, east of Carne's, set to drive by four men, at 10*l.* per fm.; lode in this end 20 in. wide, producing 1½ ton of ore per fm. The 64, east of Gore's, set to drive by six men, at 16*l.* per fm.; lode 2 ft. wide, producing 1½ ton per fm. The 54, east of Gore's, set to drive by four men, at 18*l.* per fm.; lode 2½ ft. wide, producing 1 ton of ore per fm.; after a long struggle we have got through the elvan course in this level, on the south side of the lode, and find much water flowing from the killas country. We have two pitches set in the back of the 84 fm. level, nine in the back of the 74, eight in the back of the 64, three in the back of the 54, five in the back of the 44, and one in the back of the 14; in all, twenty-eight pitches, by sixty-six men and one boy.—S. Cardozo: Feb. 9.

SOUTH DEVON GREAT CONSOLS.—I have nothing new to report since last week. All our operations are being proceeded with as fast as possible.—Feb. 8.

SOUTH HERODSFOOT.—The men yesterday met with Gavid's lode in the western hill; they found it 18 in. wide, composed of spar, gossan, flookan, and fine spots of yellow copper ore, equal to that on the beach. In about 10 days I will send up a box of specimens from this lode, and have no doubt they will prove satisfactory. A meeting of the Polperro shareholders will take place at the Ship Tavern to-morrow evening. Not only the shareholders but the inhabitants of Polperro are in high spirits about this lode. The caunter is improving daily.—J. Matthews: Feb. 9.

SOUTH POLTIMORE.—Capt. Floyd has ceased to sink shode-pits, in further search of the lode; the amount of gossan from the adit level to the last tracing being almost inexhaustible. The surface-men are preparing a saw-pit, and other necessary work. The level is continued to be driven by three men, and six others are employed in widening, and making it capable of receiving the tramway for the conveyance of the gossan. The lodes throughout are still as wide, and of the same quality as previously reported.—E. Maunder: Feb. 7.

SOUTH WHEAL YEOLAND.—We have a truly magnificent lode here, 5 ft. wide, a stone from which produced 25 per cent. for tin; this is 15 fms. further west than when last reported on, showing that the good part of the lode is not confined to one place, but extends east and west, bidding fair to make a good and lasting mine. We have a fine pile of stuff ready for the stamps, which, we trust, will go to work next week.—J. Eddy; J. Fezzey: Feb. 9.

TAMAR SILVER-LEAD.—In the 215 end the lode is 18 inches wide, composed of capel and ore—saving work. In the 205 end no lode has been taken down for the month. The 190 end is still in slidy ground. In the 175 end the lode is 20 in. wide, composed of mundic and ore—good saving work. In the 160 end the lode is 6 inches wide—rich work.—North Mine: In the 100 end the lode is 2½ ft. wide, composed of capel and mundic. In the 80 end we are driving the lode; in consequence of so much water oozing from it we cannot take it down for the present. We sampled, on Saturday, the 4th inst., computed 75 tons of rich silver-lead ore; and samples have been sent to the different smelters as usual.—J. Sprague: Feb. 7.

TINCROFT.—Highburrow tin lode in the 152 fathom level, driving east of Martin's east shaft, is 4 ft. wide, worth 15*l.* per fm. for tin and copper. The stopes in the back of this level, both east and west of said shaft, are worth 14*l.* per fm. for tin and copper. The stopes in the back of the 132 fm. level east are worth 12*l.* per fm. Chapple's lode in downright shaft, sinking below the 130 fm. level, is 2 ft. wide, saving work for tin and copper. The stopes in the back of the 110 fm. level are worth 10*l.* per fm. Grout's lode in the back of the 60 fm. level, both east and west of the rise, is 4 ft. wide, worth 20*l.* per fm.; we expect to cut this lode in the cross-cut driving north in the 52 fm. level during this month. At North Tincroft, in the engine-shaft, sinking below the 130 fm. level, the lode is 3 ft. wide, worth 28*l.* per fm. for copper. The lode in the 130 fm. level, driving east of said shaft, is 2 ft. wide, worth 6*l.* per fm. for tin and copper; in the west end, in the same level, the lode is 2½ ft. wide, worth 7*l.* per fm. In the 120 fm. level, driving west, the lode is 3 ft. wide, producing good stones of copper ore. In the 110 fm. level, driving west of engine-shaft, the lode is 3½ ft. wide, worth 14*l.* per fm. In the winze sinking below this level the lode is 3 ft. wide, worth 6*l.* per fm. for copper. Dunkin's lode in the 120 fm. level, driving east, is 3 ft. wide, saving work for tin; in the west end, in the same level, the lode is 2½ ft. wide, worth 7*l.* per fm. for tin and copper. In the winze sinking below the 90 fm. level the lode is 2 ft. wide, worth 8*l.* per fm.—Peter Floyd: Feb. 7.

TREBELL TIN.—We have cut through the lode, and are driving east and west on it; the eastern part has split, we are driving on its north part, which is about 4 feet wide, producing good stamps work throughout, better than we had formerly; we are driving west on its south part, and are carrying the level about 9 ft. wide, which is producing tin throughout, and is very kindly. We cannot tell the exact size of the lode at present, not having made much progress in driving since we cut through it. The mine has improved since last reported, and holds out hopes of a further improvement shortly. The stamps are working by day as usual We sold on the 27th Jan., to Daubuz and Co., 1 ton 9 cwts. 8 lbs. of tin, at 80*l.* per ton; and 3 cwts. 2 qrs. 18 lbs. of tin, at 69*l.* per ton.—H. Williams: Feb. 8.

TREBURGET CONSOLS.—During the past month the men in the Mill cross-cut have driven 5 fms. 1 ft.; the ground continues favourable—let at 3*l.* per fm. The engine-shaft has been sunk 2 fms. 1 ft. deeper, which I have let again at 8*l.* per fm.; the ground is hard at present for sinking. We have only 3 fms. 3 ft. more to sink to our adit level, when we shall have good ground. I would also direct attention to the great elvan course that runs through the old Treburget sett, near where she made the great deposit of lead and silver. We have a continuation of the same course in Treburget Consols. In my opinion we shall have a great deposit of mineral near the course. Capt. Ennor is of the same opinion as myself on that point; and he is certainly highly experienced with regard to lead and copper mines. I have myself not the least doubt but that we shall soon have a good dividend-paying mine. —James Sowden: Feb. 7.

TRELEIGH CONSOLS.—In the 100 fm. level rise no lode has been taken down during the week. In the 70, east of Garden's, nothing has been done, the men having been engaged in taking out old rods, and replacing them by new, from Garden's to North Downs in the 60, in order to keep down the water in both mines, which is effectually done in a satisfactory manner. We have examined the backs of Wheal Maria lode to the south of Good Fortune lode in the shallow adit, 22 fms. below the surface, as far as we could possibly do for the immense quantities of refuse left by tributers in former workings, and the gossans, of which a fair sample was taken by myself, produced by my assays, completed this evening, as follows—viz.: 16 ozs. 6 dwts. 12 grs. of silver, 2 ozs. 18 dwts. 12 grs. of gold, and 1¾ per cent. of copper to the ton of ore. The quantity of gossan existing in the backs I am not capable of estimating, as we reached the place from which the sample was taken with the greatest difficulty, and more stuff must be removed before further researches can be made early in the spring. Good Fortune lode will, no doubt, produce equally good results in the new ground, but the gossans on this lode I have not yet seen, except a few stones found at the surface. The new adit from Wheal Mary is being cleared with every possible dispatch, and we are progressing satisfactorily.—J. Prince: Feb. 4.

TRENOW CONSOLS.—Since last report the masons have completed the walls of carpenter's shop, and the carpenters are preparing the timber for laying on the roof; the masons are now preparing the slate for roofing; after it is laid on they will commence building the smith's shop. The tin ground at Carn Perran is still looking well, and the lode in Wheal Pleasant is looking better, producing good stones of tin. —J. Smith: Feb. 8.

ULPHA UNITED.—The lode in the winze is split in two or three parts, and at present poor. The shallow cross-cut is in very beautiful soft white killas; the deep cross-cut is rather hard. At Whinfield the water has drowned our lift, but we are repairing the wheel, &c., to get it out as soon as the weather is a little more favourable. I have shipped the remainder of the ore for Liverpool, and hope to go some time next week to weigh it off to the purchasers.—J. Boundy: Feb. 9.

VALE OF TOWY.—At Clay's engine-shaft, sinking under the 20 fm. level, no alteration since my last. At the 20 fm. level, driving south, the lode is 1 ft. wide, and poor; driving north, 2½ ft. wide, and more kindly in appearance than for some time past. In the 10 fm. level, driving north, the lode is 2½ ft. wide, composed of barytes, mixed with lead. In No. 2 winze, sinking under the 10, the lode is 2½ ft. wide, producing ⅛ ton of lead per fm.; driving south of Field's shaft, 2 ft. wide, worth ¼ ton of lead ore per fm. In No. 4 winze, sinking under adit, the lode is 2 ft. wide, producing ⅛ ton of lead ore per fm. In Nant winze, sinking under the shallow adit, the lode is 3 ft. wide, composed of barytes, with spots of lead. Our setting on the 4th inst. was to 11 tributers and 38 men on tutwork. Our sampling on Saturday next will be 65 tons of lead ore.—S. Thomas: Feb. 9.

WELSH POTOSI.—There is no alteration in the ore since last reported on; it holds quite as good. The engine is drawing well, and the water is forked down near the back of the 20 fm. level. We have some good piles of ore on surface now, and we shall increase them weekly. We are driving to prove the lode, and opening ground to cut ore, but by putting men to cut the ore, we could get 15 or 20 tons a month at once in back of adit only, which I shall do next week. I do not say anything yet about the 10, 20, and 30 fm. levels.—J. Hughes: Feb. 8.

WEST BASSET.—North Lode: The 84 fm. level east is worth 100*l.* per fathom. On Thursday night a large stream of water was cut in the 75 east, so as to overpower the engine, and drive the men out of the 84 fm. level; it continues to rise with the engine working 14 strokes per minute. This is considered a favourable indication of having a large hollow lode before us, and probably a good course of ore. In the winze sinking under the 65 fm. level, the lode is worth 70*l.* per fathom.—South Lode: The 42 fm. level east is worth 40*l.* per fathom.—W. Roberts: Feb. 4.

— The water this morning is about 7 ft. above the back of the 84 fm. level; it has been gradually rising on the engine since Thursday until to-night's last core. I hope the next account will be more favourable.—W. Roberts: Feb. 7.

WEST GOGINAN.—The lode in the engine-shaft, sinking under the 45 fm. level, is 5 ft. wide, composed principally of clay-slate, with a mixture of mundic, blende, and some small branches of lead ore. The lode in the 30 fm. level, driving west of cross-cut, is 6 ft. wide, and the part we carry for the level is looking more promising than we have seen it since we commenced driving in this direction; it is composed of a light blue slate, with a mixture of blende, and small branches of lead ore.—S. Trevethan: Feb. 8.

WESTON.—We continue driving eastward on the course of the Ryder lode, without any alteration in character. We have this day re-commenced sinking Jones's shaft.—R. P. Edelsten.

WEST PAR CONSOLS.—We are daily expecting to cut the branch we had in the shaft in the 30. The ground is really beautiful, with strings of black jack and mundic in the country, showing that it is mineralised. I should think that six weeks (unless the ground becomes harder) will intersect the first lode to the north.—J. Webb.

WEST SORTRIDGE CONSOLS.—We are making much progress in clearing the old workings, and hope to see the bottom in about a week, which will enable me to give you particulars with respect to the further development of the sett.—A. Pryor.

WEST WHEAL ARTHUR.—Agreeable to your request I inspected the above mine and surveyed it throughout, a plan of which, with the several lodes laid thereon, accompanies this; as you requested my particular attention to the lodes and works, I beg to make the following remarks:—The sett is well situated in connection with the surrounding promising mines of Calstock United, East Cornwall, Wheal Langford, Old Wheal Brothers, &c., and its lodes appear a continuation of Wheal Arthur productive lode; the stratum is good, and the general appearances very encouraging. There are already discovered six east and west lodes, and two cross-courses in the sett, four of the lodes strongly indicate the produce of copper, and two of them are known to be silver lodes from the works made thereon in the adjoining setts; I paid but little attention to the latter, having more carefully inspected the copper lodes. I have termed the two principal lodes the great lode and great gossan lode; these are in work, and their indications are exceedingly promising. The great lode is worked on to some extent, but not a sufficient depth to expect a large produce of copper, still the present produce of these lodes are such as to guarantee a profitable return for any capital which may be judiciously applied. The great lode is from 10 to 15 feet wide, is sunk on about 10 fms., driven on at this depth about 8 fms., and driven on about 18 fms. at a shallow level. The appearance at each of these places is exceedingly good; the lode is composed of several kindly matrices, with good stones of yellow copper ore, carrying an abundance of fine gossan on its back, and surrounded with strong capel, interspersed with spar. The great gossan lode is only opened on by one shallow shaft sunk on its course, and by some shode pits; at the shaft it has a beautiful appearance, producing large quantities of gossan, spar, peach, mundic, and impregnated with copper ore: it is 8 feet wide; I pronounce it an exceedingly kindly lode. The other two copper lodes are only partially opened on, therefore you will excuse me making any comment thereon; but allow me briefly to state that it is a compact sett, which promises great returns, and I believe it a valuable property, which should be prosecuted with the application of capital, whereby there can be no doubt of success. —J. Davey.

WHEAL ARTHUR.—North Lode: The lode in the 50 west is 5 ft. wide, yielding 2 tons of ore per fathom, worth 8*l.* per ton. The lode in the 35 west is 5 ft. wide, yielding 1½ ton of ore per fathom, worth 8*l.* per ton. The lode in Cruse's stope, in the back of the 35 west, is 4 ft. wide, producing 2 tons of ore per fm., worth 7*l.* 10*s.* per ton. The lode in the 20 west is 2 ft. wide, producing good stones of ore.—Old Lode: The lode at the engine-shaft is 10 ft. wide, and the south, or footwall, not yet met with; it is still yielding good stones of copper ore. The lode in the 80 east is 4 ft. wide, yielding good stones of ore. The lode in the 60 east is yielding stones of ore.—Watson's Lode: The lode in the 50 west is 3½ ft. wide, composed of quartz, mundic, prian, and spots of copper ore.—J. Carpenter: Feb. 4.

WHEAL EDWARD.—South Lode: The engine-shaft is sunk 2 fms. 1 ft. below the 42 fm. level; the 42 is driven east and west 3 fms., the lode is 4 ft. wide, composed of spar, mundic, capel, and spots of copper ore; there are 12 men employed in this level driving east and west. The 30 east is driven 24 fms. 2 ft. 6 in., the lode is 3 ft. wide, unproductive; the 30 west is driven about 3 fms., the lode is 3½ ft. wide, composed of spar, mundic, gossan, and stones of ore; just behind the 30 west a winze is sunk about 12 fms., the lode is 3 ft. wide, composed of mundic, spar, and spots of ore; the 30 east is suspended for the present; there are four men driving the 30 west.—North Lode: We have just commenced operations on this lode, north-east of the engine-shaft, and are sinking a shaft on the course of the lode; the back of this lode is 16 fms. north of the engine-shaft, and is underlying at least 3½ feet in a fathom north.—T. Carpenter: Feb. 4.

WHEAL FRIENDSHIP (St. Hilary).—The lode recently cut into is certainly very fine, and can be worked on tribute at 4*s.* in 1*l.* It is advisable to sink 10 fms. deeper, which will both prove the lode and the inclination of the course of ore, besides throwing open a great extent of ore ground between the Boundary shaft and Bucketi's, and still more extensive to the engine-shaft. There can be no question as to the certainty of immense returns from this lode alone.—J. Richards: Feb. 6.

WHEAL HARRIETT.—The lode in the engine-shaft is about 16 in. wide, composed of spar, mundic, and spots of copper ore—a kindly looking lode; the shaft is now down below the 30 about 11 fms., I hope by next setting-day it will be down 12 fms. below the 50, and then it will be needful to cut a small plat in that level, to draw away the stuff by the whim. The 50 east, on the south lode, is driven as far as the cross-course; the lode appears to be shifted or hove by the cross-course. The levels above have been driven north to try to cut it, but it has never been seen to the north, so we are driving south on the cross-course to see whether we can cut it, which I hope we shall. We have driven through 2 fms. of good ore ground under the sump-winze, producing 3 tons to a fathom; when we cut the lode in the cross-course we shall hole that piece of ground to the sump winze above,—that is, to the 46 sump winze,—which I hope will turn out a good pile of ore.—J. Thomas: Feb. 6.

WHEAL GOLDEN CONSOLS.—Thorne's Shaft: This shaft is sunk 5 fms. under the 107; we are pushing on in sinking with all speed, with eight miners and three labourers. In driving the levels there is no change worthy notice.—Young's Shaft: In driving the 107 north the lode still continues good. In driving the 97 north the lode has improved, and is producing 5 cwts. of ore per fathom.—Engine-shaft: In sinking there is no alteration. In driving the 97 south we have driven through the cross-course, and find the lode more productive, and the ground moderate for driving. —Webb's Shaft: In driving the 87 south it is not so favourable as last reported; the lode is 2 ft. wide, producing good stones of ore. In sinking Bennett's winze under the 70 the ground is favourable—lode 20 in. wide, worth 12 cwts. of ore per fathom.—Maxwell's Shaft: The levels are much the same as last reported. The tribute department looks well. We sampled, on Saturday, Feb. 4, 53 tons of ore, for sale on the 15th inst.—John Williams: Feb. 6.

WHEAL ROBERT.—There is no alteration to notice in the shaft since my last report. We have still very favourable ground for sinking, which we are doing with all speed.—W. Neill: Feb 8.

WHEAL SAMSON.—We have made other discoveries here, of which I cannot speak positively for a few days. I perceive the gossan carries 5 ozs. of gold. I should advise you having it tried in some large quantity, and if the average should be satisfactory, I consider we might be able to break 100 tons per month.—J. Spargo.

WHEAL TRELAWNY.—In the 92 end, south of Trelawny shaft, the lode is 3 ft. wide, worth 8*l.* per fm. At the north mine, Smith's shaft is sunk 6 ft. below the 98. The lode in the 98, north and south ends, is 2 ft. wide, worth 14*l.* per fm. In the 88, north end, the lode is 3 ft. wide, worth 9*l.* per fm.; in the south end the lode is 3 ft. wide, worth 11*l.* per fm. In the 78, north end, we have met with a small branch of lead and can, and expect soon to have a good lode here. In the 68, north end, the lode is 1½ ft. wide, worth 7*l.* per fm. In the 55, north end, the lode is 2 feet wide, worth 10*l.* per fm. In the 40, north end, the lode is 1 ft. wide, worth 8*l.* per fm.; in the south end the lode is still split, and poor. Chippendale's shaft is sunk 7½ fms. below the 40 fm. level. The rise against the shaft is extended 4 fms. The stopes and pitches are much the same as last week.—J. Kemp: Feb. 7.

WHEAL TREMAYNE.—The floors of spar at the boundary engine-shaft, sinking under the 93, are speedily disappearing, and a clean killas-ground coming in. I expect we shall get the sump down to the 103 this month. In the 93 fm. level, east of Allen's shaft, on Allen's branch, the branch is worth 8*l.* per fathom; the stopes in the back of this level are worth 5*l.* per fathom. In the 83 cross-cut, east of the same shaft, we have cut a small branch, producing stones of tin (we intend driving east on the course of the same); the stopes in the back of the same level are worth 5*l.* per fathom. In the 73, east of the same shaft, on Allen's branch, the branch is worth 6*l.* per fathom; in the cross-cut south, in the same level, towards the engine lode, the ground is easy for driving, and we have not cut the lode yet; in the cross-cut south of the same level, towards Wallis's lode, the ground is harder for driving; in the 63, east of the same shaft, on Allen's branch, the branch is worth 4*l.* per fm.; the stopes in the bottom of the same level are worth 7*l.* per fathom. At the new engine-shaft on the south lode, in the 90 east, the lode is 9 in. wide, producing some saving work for tin. In the 70, east of Arthur shaft, on the same lode, the lode is 5 ft. wide, chiefly composed of spar, mixed with mundic. In the 50, east of the same shaft, the lode is 1 ft. wide, producing spots of copper ore, but not to value. We are clearing the 30 east of middle shaft, on the same lode, and opening some tribute ground; the stopes in the back of the same level, east and west of Taylor's shaft, are worth 3*l.* per fm. Our tribute is looking slight.—R. Williams; J. Williams; H. Rogers.

WHEAL TRISTREM.—We set, on Saturday last, the engine-shaft to sink to a 52 fm. level, by 12 men, at 14*l.* per fm. The cross-cut in the 40 fm. level is driven 14 fms. south of the engine-shaft, and has cut No. 1 lode, which is about 1 ft. wide, with a large stream of water issuing from it; we have set this end to drive by six men, at 4*l.* 10*s.* per fm. The east end in the 28 fm. level, on No. 1 lode, is set to drive by six men, at 5*l.* 10*s.* per fm. The cross-cut south of the whim-shaft by six men, at 6*l.* per fm.; and the end north of the whim-shaft to drive on the course of the lode, by six men, at 3*l.* 10*s.* per fm. There is no alteration in these ends in the 28 fathom level since our last report.—J. Jenkin: Feb. 7.

WHEAL WILLIAMS.—The lode in the 40 fm. level, driving west of the engine-shaft, is much improved in character, being composed of a beautiful light capel, spar, and mundic, thickly impregnated with yellow copper ore for upwards of 2 ft. wide. The ground in the eastern end, and same level, is a little harder for driving; the lode has not been taken down since last reported. The lode in the 28, driving west of Russell's winze, is about 2 ft. wide, composed of a light capel, soft spar, and very strong mundic.—G. Rowe: Feb. 7.

WHEAL WREY.—The 12 fm. cross-cut is extended about 4 fms., ground still very tough and wet, and the speed slow, though the men are working from 2 p.m. on Monday till 10 p.m. on Saturdays. The shaft is divided to this level, and the sinking has been resumed; the ground, though very hard at first, is now a little easier, being more free from spar.—J. Offord: Feb. 9.

WHEAL ZION.—On Saturday last, we set the following bargains. The engine-shaft to sink by eight men, at 20*l.* per fathom, now 3½ fms. below the 50. The 50 fm. level east to six men, to drive on the south part of the lode, at 6*l.* per fm., and 4 fm. east of cross-cut; the lode is improving in appearance, as we get off from the elvan course, and now producing stones of ore. The 40 cross-cut south to four men, at 9*l.* per fathom, the ground troublesome for driving. The winze below the 40 fm. level, 18 fms. east of cross-cut, is 12 ft. long and 6 ft. wide, we set six men on the orey part of the lode, at 10*l.* per fathom; in taking down the lode in the side of the level for room to sink, we broke some splendid rocks of ore, which are now at surface; the lode is improving going down. We set the 40 fm. level east to four men to cut through the lode 11 fm. east of the winze, at 8*l.* per fm.; and Richard's shaft to sink by eight men, at 15*l.* per fathom; we are down 37 fms., 7 fms. of which is on the lode, which is producing fine stones of ore, and looking altogether remarkably well.—James Bray: Feb. 8.

YEOLAND CONSOLS.—The plunger-lift will be fixed and ready for work by Monday next. We shall now be able to get to work without so many hindrances, and our drawing-engine will enable us to send a large quantity of tinstuff to the stamps. We shall immediately resume the sinking of the perpendicular shaft. The lode is looking very well, in the bottom level especially, and we may now expect much larger and more regular samplings. In answer to the enquiry of how much gossan we have, we may say that we can form no idea, as it holds down from the surface to the bottom, 64 fms. deep, and has not yet been unbottomed; it averages 1 oz. of gold to the ton throughout.—J. Eddy; J. Fezzey: Feb. 9.

FOREIGN MINES.

GRAND DUCHY OF BADEN CHARTERED MINES:—

Freiburg, Feb. 2.—The end driving east on Teufelsgrund lode, in the Wilhelm's level, has not improved since last report. I have set six men to cross-cut in the laying wall for the purpose of proving the ground in that direction. In the rise in the back of the level, going east, the lode is 6 in. wide, producing 3 cwts. of ore per fm.; in ditto, driving west, the lode is 15 in. wide, producing 14 cwts. of ore per fm. In the winze under the Wilhelm's level, driving east, we are still in the slide; ditto, west, the lode is 18 in. wide, producing 12 cwts. of ore per fm. In pitch in back of ditto, No. 10a, the lode is 2 in. wide, with stones of ore. In pitch, in back of ditto, at No. 4b, the lode is 15 in. wide, producing 10 cwts. of ore per fm. In pitch in back of ditto, at No. 5, the lode is 10 in. wide, producing 6 cwts. of ore per fm. In pitch in back of ditto, at No. 9, the lode is 3 in. wide, producing 3 cwts. of ore per fm. In pitch in back of ditto, at No. 10, the lode is 6 in. wide, producing 5 cwts. of ore per fm. In the end driving east, at the cross-cut in the middle level, the lode is 4 inches wide—poor; in driving east, in the rise in back of middle level, the lode is 1 in. wide—poor. In pitch No. 13a, in ditto, the lode is 5 in. wide, producing 9 cwts. of ore per fm. In pitch No. 11b, in ditto, the lode is 12 in. wide, producing 11 cwts. of ore per fm. In pitch No. 13a, in ditto, the lode is 4 in. wide, producing 2 cwts. of ore per fm. In pitch No. 11a west, in ditto, the lode is 4 in. wide, producing 3 cwts. of ore per fm. In the winze sinking under Trudpert's level, No. 5, the lode is 15 in. wide, producing 18 cwts. of ore per fm. The winze, No. 3, is within 2 ft. of the middle level, and we shall commence driving west from the bottom of it to meet our end going east in the middle level next week. The lode in the bottom of this winze is 14 in. wide, producing 5 cwts. of ore per fm. In the rise in the back of Trudpert's level the lode is 5 in. wide, worth 2 cwts. of ore per fm. In pitch No. 22b, in the back of ditto, the lode is 15 in. wide, worth 20 cwts. of ore per fm. In pitch No. 17b, in back of ditto, the lode is 10 in. wide, worth 5 cwts. of ore per fm. In pitch No. 22a, in back of ditto, the lode is 8 in. wide—poor. In the winze sinking on Schindler lode, in ditto, the lode is 9 inches wide, producing 3 cwts. of ore per fm.; in the rise on ditto, the lode is 15 in. wide, producing 4 cwts. of ore per fm. In pitch No. 3 north, in ditto, the lode is 11 in. wide, producing 12 cwts. of ore per fm. In pitch No. 4 north, in ditto, the lode is 12 in. wide, producing 3 cwts. of ore per fathom. In pitch No. 3 south, in ditto, the lode is 14 in. wide, producing 6 cwts. of ore per fm. In pitch No. 4 south, in ditto, the lode is 16 in. wide, producing 4 cwts. of ore per fm. In pitch No. 5 south, on Schindler, in back of Trudpert's level, the lode is 20 in. wide, producing 6 cwts. of ore per fm. Our engine-shaft is 142 ft. down, and the ground rather softer than last month. For the last two days we have had some rain, which has enabled me to set the crushers and stamps to work again. Our dressing-floors being now covered in, allow of our working at night with the crushers and round buddles, and we shall continue to do so as long as the weather holds good. During the month of January we raised 16,600 cwts. of rough ore, which will produce 33½ tons when dressed. We have now upwards of 6300 tons of rough ore at grass; this will produce about 240 tons when dressed. At the foundry we have 2¾ tons dressed. We are very busy dialling and mapping the mines, and when all is completed you shall have copies. In the end driving south on Wies lode (supposed to be the Schindler), the lode is looking promising; it is 6 in. wide, with good stones of ore. In the end driving east, at Herrenwald, the lode is 7 in. wide, and we can raise about 1 cwt. of ore per lachter (10 ft.) In the end driving west, the lode is 4 in. wide, producing about 2 cwts. per lachter.

THE IBERIAN MINING COMPANY.—

The directors have received advices from their mining engineer in Spain, enclosing plan and reports of the lead and copper mines. He says:—

The Galdacano property comprises four known lead lodes, and an extensive sett. The No. 1 mine is a splendid lode, giving from 5 in. to 20 in. of absolutely clean lead, like the samples forwarded; it was cut in the adit stronger and cleaner than in the work above, giving great promise for depth: worked with spirit, and proper machinery for unwatering, this lode will give an immense quantity of mineral, at a comparatively small cost. The No. 2 mine I consider to be the great lottery of the province, in the way of lead mines. A pit has been sunk only 11 fathmos from the surface, and the amount of former workings has been very small, but there was obtained from them upwards of 4000 quintals (about 180 tons) of first class mineral, and a heap of stuff for cleaning, worth perhaps 300*l.*; it is said to have been in some places 28 in. wide, and that the lowest point left it 9 in., in both cases of solid galena. As will be seen by the plan, this lode would be cut at a distance of about 117 fms. from the intended shaft of the No. 1 mine, thus unwatering a splendid piece of ground; the point of intersection would be just under the pit. The No. 3 and 4 mines have merely been opened on the course of the lodes; the first is troubled and irregular, at present from 10 in. to 2 ft. wide, carrying lead throughout for cleaning; the level has been driven 174 feet. On this Galdacano property there are numerous branch lodes and strings of lead, all worth trial. The No. 5 mine (copper) is entirely a newly-discovered lode, in the clay-slate formation, and presenting at this moment a very favourable appearance. Its nature is a gossany quartz, with copper and iron pyrites, as will be seen by the samples forwarded; it can be traced for a considerable distance over the hill, and lies in very good ground for working. We are now driving a level on the course of the ore, and, should it prove well to hill, intend to intersect it by two levels, opened at some distance down the mountain. It lies at half an hour's ride from the port of embarkation, and would pay handsome profits, even if it only turned out low class ores. The Iberian Mining Company starts on this side of the water with first-rate prospects; before many months we shall be sending you over a large cargo of first-class mineral." It must be always borne in mind that the whole of this company's property is not more than six miles from the port of embarkation, and that their mineral is conveyed to the wharf and shipped at the cost of a few shillings per ton.

LINARES MINES.—[Received from Mr. Henry Thomas.]

Pozo Ancho, Jan. 31.—The various tutwork bargains being measured for work done in January, are now set for February as follows:—West of engine-shaft, the 75 west is set to drive by four men, at 450 reals per vara, and is worth 1 ton of lead ore per fathom. The 65 west is set to drive by four men, at 500 reals per vara. The ground driven in January is 3 varas 0 ft. 2 in., and the lode is worth 2½ tons per fm. Caballeros winze, sinking under the 55, has been deepened 2 varas, the four men employed continuing till communication is made with the 65, at 800 reals per vara; the lode is worth 1 ton per fm. The 55, driving east of Casualidad cross-cut, has been extended 4 varas 0 ft. 8 in., and is re-set to drive by two men at 320 reals per vara; the lode is worth 1 ton per fm. The 55, driving west of Casualidad cross-cut, has been driven 2 varas 2 ft., and is re-set to drive by two men, at 300 reals per vara; the lode worth 1½ ton per fm. The 55, driving west of Casualidad winze, on north branch, is still in disordered ground, and is not yet measured, nor is the cross-cut, driving north from near this winze. There is nothing new in the cross-cut, driving north from west of Casualidad winze, in the 45; the two men employed have driven 2 varas 1 ft. 6 inches. The 45 is set to drive west on north branch to two men, at 300 reals per vara. The winze sinking under the 45 is set to two men, at 350 reals per vara; the lode being worth 1 ton per fm. The winze sinking under the 31, on north branch, is set to two men, at 450 reals per vara. The sinking for January is 1 vara 1 foot 3 in., the lode not to value. At Kennedy's, the men have cross-cut and driven in the 20 7 varas 2 ft. 4 in., and have re-taken to drive west by four men, at 260 reals per varas the lode here is unproductive. The 20, driving east from the Footway shaft, towards Kennedy's, has been extended 11 varas 2 ft. 7 in., and is re-set to drive by six men, at 200 reals per vara; the lode is large, with spots of ore. The 20, west of Warne's shaft; has been driven 3 varas 2 ft. 3 in., and is re-set to drive by two men, at 200 reals per vara; the lode is worth ½ ton per fathom. In the western pertenencia, on the north lode, the men have driven 2 varas 0 ft. 4 in. in the 15, and have re-taken to drive by two men, at 300 reals per vara; the lode contains a little lead, but not to value. The winze sinking under the 10 has been deepened 3 varas 0 ft. 4 in., and is re-set to sink by three men, at 240 reals per vara; lode at present poor. East of engine-shaft, the 65, east of San Jorge, has been extended 2 varas, and is re-set to drive by four men, at 600 reals per vara; lode worth 3 tons per fm. The 65, east of San Anton, on the south part of the lode, has been driven 4 varas 2 ft. 4 in., and is re-set to drive by four men, at 350 reals per vara; the lode is at present not of commercial value. The 55, east of Fernandez winze, has been driven 3 varas 1 ft. 5 in., and is re-set to drive by four men, at 420 reals per vara; lode worth 2½ tons per fm. Rodriquez's winze, sinking under the 45, in advance of the 55, has been deepened 3 varas 0 ft. 2 in., and is re-set to sink by four men, at 400 reals per vara; the lode is worth 1½ ton per fm. The 45, east of Thorne's, has been driven 4 varas 1 ft. 6 inches, and is re-set to drive by four men, at 150 reals per vara; the lode is worth 5 tons per fm. The 31, east of Thorne's shaft, has been driven 3 varas 0 ft. 8 inches, and is re-set to drive by four men at 400 reals per vara; lode worth 1 ton per fm. The 20, east of Thornes, has been opening good ground for some time past, but having omitted to take the note of the measurement, I cannot include it in this report. The cross-cut, driving north from the 45, has been extended 3 varas 1 ft. 5 in., and is re-set to drive by four men, at 500 reals per vara. The cross-cut, driving north, in the 31, has been holed to the level, driving on the north lode, and the two men have been set to strip down the side of the level on the south lode, for further proof. On the North lode, the 45, west of Garcia's winze, has been driven 3 varas 1 ft. 3 in., and is re-set to drive by four men, at 350 reals per vara; the lode is worth 1 ton per fm. The 45, east of Garcia's winze, has been driven 3 varas 0 feet 10 in., and is re-set to drive by four

ROYAL SANTIAGO MINING ASSOCIATION.—[Received Feb. 9.]

Cobre, Jan. 4.—Taylor's shaft is not looking so well; the ore on the north side has disappeared, and the nature of the lode has lately changed for the worse; it will not yield over 1 ton of ore per fm. In the 44 fm. level we have met the cross-course alluded to on the 28th Dec., and have not yet cut the lode on the east side. The ore broken in Dec. has come from the stopes east and west of Taylor's shaft, between the 44 and 50 fm. levels; east of the shaft there is still a good lode, averaging 6 tons of ore per fm. West of the shaft there also remains several fathoms to break down, yielding 2 to 3 tons per fm. At Discovery shaft, and to the west, there is no alteration deserving notice.—Ore raised in Dec., 71 tons; precipitate, 4 tons.

UNITED MEXICAN MINES.—[Received Feb. 3.]

Guanaxuato, Dec. 26, *and Mexico, Dec.* 30.—MINE OF RAYAS.—The operations of the month have manifested much variability in this mine—one week having given a profit, and another resulted in a loss. The average has been a slight excess of returns over expenditure.

ALDANA.—The limited outlay now going on in this mine will be still further reduced at the end of the year.

JESUS MARIA Y JOSE.—The upper level of San Apolonio, to the north-west, has been carried on to the distance of 38 varas, and a pozo been opened at that point to go down upon the corresponding level of St. Hilario, which is being driven below. In the latter 18 varas have been obtained; and if nothing should occur to prevent it, a junction may be expected to take place in about five weeks from this date. As these operations are being carried on outside the vein, for facility and economy in driving, but little of interest can be developed, until the above-mentioned junction of the new pozo with the level of San Hilario may take place. The extraction by buscones from the Villarino territory has produced $288 2.

TRINIDAD.—Since the last report from this mine, the deepening of the shaft has been proceeded with, and a distance driven in it of 14 varas. The work in the pozo of San Albino has been discontinued, to avoid danger to the workmen in the shaft, who, being directly under the bags of water and stone in the process of extraction, were in peril of their lives. A fatal accident in each of the neighbouring mines of San Vicente and Los Locos has rendered unusual caution necessary. The water in the mine remains about the same as last reported.

Finances in Mexico.—The usual monthly statement of returns and expenditure brought down to the 24th inst., shows an actual cash asset in hand of $4962 4 7.

Zacatecas Claims.—In respect to these claims, a further sum of $6369 has been received at Vera Cruz and Tampico towards their liquidation. Capt. Farrell was in the City of Mexico, endeavouring to complete yet further arrangements relative to the due payments to the company from the Mexican Government upon the duties on bullion exported.

Quicksilver.—No variation had occurred in the price of this article since last reported upon. The stock was as follows:—In use at Barrera, 7607 lbs. 6 ozs.; in use at Dolores, 6755 lbs. 1 oz.: total, 14,362 lbs. 7 ozs.

THE IRON AND METAL TRADES OF SOUTH STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN BIRMINGHAM.]

FEB. 9.—The favourable reports relative to the Iron Trade of this district which I have forwarded to you during the last six months, have this week been fully confirmed by the returns of the various banking establishments of the surrounding towns. As these houses have been established in connection with, and partly for the greater support of, the mining operations of the county, they are amongst the best tests of the sound and healthy state of the iron and coal trades of the district. At the annual meeting of the Wolverhampton and Staffordshire Banking Company, held at the Swan Hotel in the above town, on Monday last, Mr. Alexander Hordern in the chair, Mr. George Briscoe laid the report before the company, from which it appeared that the business of the bank had considerably increased up to the close of the last year, the clear surplus profits on the year's business being upwards of 12,000*l.*, after deducting all expenses, bad debts, &c. From this sum a dividend of 7 per cent. was paid in September last, and it is now proposed to pay a further dividend of 10 per cent. for the second half of the year, which would still leave the guarantee fund nearly 51,000*l.* On Tuesday, the Bilston District Banking Company met, and their report was also highly satisfactory. A dividend of 4 per cent. was declared, making, with a previous one, 7½ per cent. for the year. On the same day, the Dudley and West Bromwich proprietary met, when a dividend of 10s. per share for the half-year ending the 31st December, in addition to 10s. per share paid in June last, was declared, and also a bonus of 5s. per share, free of income tax, payable on and after the 1st March next. An addition of 8000*l.* was added to the guarantee fund, making that amount 40,000*l.* The directors of the Stourbridge and Kidderminster Banking Company have declared 8s. per share half-yearly dividend; and the Shropshire Company have declared a dividend of 5 per cent. for the half-year ending at Christmas; and there can be no doubt that all similar establishments in the district will show a large increase of business. Nor is the small number of failures in the iron trade less remarkable. Since the unfortunate speculations which wrecked the fortunes of Mr. Attwood and a few others, there has not been a failure worth noticing, and the payments of the last quarter were well made. So far, therefore, all the public means of arriving at an accurate knowledge of the real state of the trade tend to show that it is in a healthy state, and that our transactions are of a *bona fide* character. The reports received here from Dudley, Bilston, &c., of the demand for iron during the past week, are still highly satisfactory. At the great works of the Messrs. Williams, the orders are larger than can be easily executed, and, indeed, there are few of the first houses not equally embarrassed with orders both for the foreign and home markets. The only drawback on the trade is the continued scarcity of coal, and its high price. The demand for ironstone is excessive, and many orders have been refused within the last few days. In accordance with the suggestions made from various quarters respecting the Cannock Chase, fresh operations have been commenced on that estate, and a large quantity of coal is now being daily conveyed on the South Staffordshire line to the various works in the district. Within the last few days men have been employed sinking new shafts on the Chase, and a great supply of excellent coal may soon be expected from that quarter.

The Tin Trade is still in an unsatisfactory state, owing to the high price and scarcity of the article. I now know that the effect of the high price of this article is proving most injurious to the trade. Some of the small manufacturers, who cannot make for stock at present prices, have suspended their works altogether, and others, I know, will soon follow their example. In a short time, if present prices continue, Britannia-metal goods will not be a drug in the market, and some other species of ware must supply their place. Already, I understand, inferior articles, electro-plated, are now being made, and intended as a substitute for the more substantial goods. The latest quotation for block-tin which I have seen is 131s. per cwt., being very nearly double what it formerly was.

In the Copper Trade there is rather increased activity, owing, no doubt, to the extensive orders in course of execution at the works of Messrs. Winfield, Ratcliff, Salt, and others engaged in the brass trade. At the Soho Works there are some very large orders for boilers in course of preparation, and at the London Works iron houses and heavy machinery for Australia are being made in large quantities.

There are few trades, however, in which greater activity prevails than in the Glass Trade. At the immense works of Messrs. Chance, Spon-lane, there is an immense number of hands employed, particularly on window-glass; and at the plate-glass works the demand is unprecedentedly large. This also applies to stained glass, which is now being turned out of the manufactory of Messrs. Hardman and Co., Newhall-hill, in a superior style, from the designs of the late Mr. Pugin, and from those not less tastefully prepared by his son, Mr. E. Pugin.

In the Gun Trade there is increased activity. We are beginning at last to reap some benefit from the threatened war with the Czar, in the extension of a few good orders for rifles, and heavier guns, rendered necessary by the increase of the army.

Of the great works of the town, that which now attracts most attention, and deservedly so, is the great central railway station, rapidly approaching completion, and which, when finished, will be, without exception, the most attractive and extensive erection of the kind in England.

In connection with the most recent inventions may be noticed a paper-cutting machine, invented by Mr. Wm. Morgan, of Summer-lane. It is now at work in the establishment of Messrs. Cockle and Co., Bartholomew-street, and has been tested within the last few days by a number of practical judges. One of its peculiarities consists in the cut of the knife being absolute, instead of resulting from a dead pressure. The radial action of the knife imparts to it a lateral motion in its downward course through the material on which it is employed, and the operator is enabled to divide a ream of hard paper or millboard with great ease. When the cut is completed, the knife is raised without reversing the winch-handle, and it may be thrown into gear at any distance from the bed, according to the working hand. In the return of the knife there is a saving of time, as it rises in one-third less time than is required to make the cut. The speed can also be changed by the insertion of a pin, when light work can be done or edges cut in one-third the time of the slow motion.

COAL AT CAPE PATTERSON.—Accounts from Sydney announce that new and extensive seams of coal had been found at Cape Patterson, which is not very far from Sydney. The coal is on the seaboard, and is represented to be workable. Three seams had been laid open, one 18 ft. in breadth, and 6 ft. thick. A body of men had been immediately dispatched to commence working operations, and should the result be such as the discoverers or promoters of the measure anticipate, it will be a matter of considerable importance, not only to the colony, but also to the steam interest. A deposit of freestone had also been found, admirably suited for public and other large buildings. Tin is also mentioned as having been discovered in the tailings.

Transactions on the Stock Exchange.

Shares.		*Paid.*	*Last Prices.*	*Business Done.*
100000	Agua Fria	1	⅞ — 1⅛ pm.	2⅛
30000	Anglo-Australian Gold	1	⅛ dis.— par	—
100000	Anglo-Californian	½	⅛ dis.— ⅛ pm.	—
18000	Australasian	2	1¼ — ¼ dis.	—
20000	Australian	6	1⅞ — 2⅛	2⅛
60000	Australian Cordillera	1	⅜ — ⅝ dis.	⅛
100000	Australian Freehold	1	⅜ — ⅝ dis.	⅛
50000	Ave Maria	1	⅜ — ⅝ dis.	—
72000	Baden, Grand Duchy of	1	⅛ — ⅛ dis.	—
200000	British Australian Gold	1	⅛ — ⅛ dis.	—
210000	Carson Creek	⅛	⅛ — ⅛ dis.	—
80000	Clarendon Consols (Jamaica)	½	par — ½ pm.	—
100000	Colonial Gold	1	par — ¼ pm.	1¼
76000	English and Australian Copper	5	2 — 2⅛	2⅛
100000	Great Nugget Vein	2	⅛ dis.— par	—
100000	Ditto, Registered	2	⅛ dis.— par	—
60000	Liberty	1	⅜ — ⅝ dis.	½
60000	London and Calif. Gold Quartz	1	⅛ — ¼	—
10000	Mariquita	1	⅛ — ⅛ dis.	—
20000	Mexican and South American	9	6⅞ — 6⅞	6⅞
60000	New Granada	1	⅜ — ½ dis.	½
24000	Norwegian Monde	1	par — ¼ pm.	1⅛
100000	Port Phillip	1	⅛ — ⅜ dis.	—
18000	Pontgibaud Silver-lead	20	17 — 19	—
60000	Quartz Rock	1	⅜ — ⅝ pm.	1⅜
40000	South Australian	1	⅜ — ⅝ dis.	—
75000	Walker	1	⅜ — ⅝ dis.	—
100000	West Granada	1	⅜ — ⅝ dis.	—
100000	West Mariposa	1	⅜ — ⅝ dis.	—
100000	Yuba	1	⅜ — ⅝ dis.	—

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET, London, February 10, 1854.

		per Ton.
ENGLISH IRON.		
Bar and bolt *a*	—	£9 10 0
In Wales *a*	—	8 10 0
In Liverpool *a*	—	9 10 0
In Staffordshire *a*	—	10 10 0
•Sheets, single *a*	—	12 10 0
• ,, double *a*	—	14 0 0
•Hoop *a*	—	11 15 0
•Rod, round *a*	—	11 0 0
Nail rod, square *a*	—	10 10 0
Rails (Wales) *b*	—	8 0 0
,, (Staffordshire) *b*	—	8 10 0
Railway Chairs, Clyde *b*	—	—
Pig, No. 1, Clyde *b*	—	3 17 0
3-5ths No. 1 & 2-5ths No. 1, in Wales *c*	—	3 16 0
	—	4 10 0
Scotch Pig No. 1 in London	—	5 0 0
Stirling's Non-laminating, or Hardened, Surface Rails	9 0 0	9 2 0
Cold-blast, No. 1 Foundry	5 10 0	6 10 0
Charcoal bars	—	14 10 0
Stirling's Patent Toughened Pigs } Glasg.	—	3 12 6
Ditto Wales	4 0 0	4 5 0
FOREIGN IRON. *a*		
Swedish	—	12 0 0
Russian CCND	—	17 0 0
Indian Charcoal Pigs in London	—	6 0 0
FOREIGN STEEL. *a*		
Swedish keg, nominal	—	16 0 0
Ditto faggot	—	—
ZINC.		
In sheets *d*	p. ton	32 0 0

SPELTER.		
On the spot	p. ton £ —	24 10 0
To arrive	,, —	25 5 0
COPPER.		
Tile, 14 to 28 lbs. *a*	p. ton	126 0 0
Tough cake *a*	,,	126 0 0
Sheathing and bolts *a*	p. lb.	0 1 2
Sheet *a*	,,	0 1 2
Bottoms *a*	,,	0 1 3
Old *a*	,,	— —
Yellow Metal *a*	,,	0 1 0
Wetterstedt's Pat. Met.	cwt.	2 0 0
ENGLISH LEAD. *a*		
Pig	p. ton	23 0 0
Sheet	,, —	24 0 0
FOREIGN LEAD. *a*		
Spanish, in bond	p. ton	22 0 0
ENGLISH TIN. *c*		
Block	p. cwt. —	6 16 0 0
Ingots	,, —	— —
Bar	,, —	6 11 0
Refined	,, —	— —
FOREIGN TIN.		
Banca	p. cwt.	6 11 0
Straits (uncertified)	,,	6 8 0
TIN-PLATES. *b*		
IC Charcoal	p. box —	1 14 0
IX Ditto	,, —	2 0 0
IC Coke	,, —	1 7 6
IX Ditto	,, —	1 13 6
Canada plates *a*	ton —	16 0 0
QUICKSILVER *f*	p. lb.—	0 2 4

Terms.—*a*, 2½ per cent. dis.; *b*, nett; *c*, 3 ditto; *d*, 1½ per cent. dis.; *e*, 2 ditto; *f*, 1½ ditto; deliv. in Liverpool 10s. per ton less.—† Discount 5 per cent.
• Delivered in Liverpool 10s. per ton less.

RAILS are more enquired after, and some purchases were made by a manufacturer, at rates which have not transpired.

SCOTCH PIGS have fluctuated from 75s. to 77s. 6d. at Glasgow, at which the market leaves off.

SPELTER is firm at 24*l.* 10s. on the spot, and 25*l.* to 25*l.* 5s. for Spring delivery.

COPPER—No alteration. TIN-PLATES—A large business doing.

TIN—The last quotation was, Banca 131*l.*, and Straits 128*l.*

MINES.—The market continues in a quiet state, for speculative shares; but a good amount of business has been transacted in dividend mines amongst the large dealers; and the orders for this description of stock from among the general public are becoming more extended. Alfred Consols are not quite so firm, and are last quoted at 25*l.* 10s. Devon Consols have been purchased at 425*l.*; West Caradon, 275*l.* to 280*l.*; South Caradon, 390*l.*; Herodsfoot at 9*l.*; North Pool, 200*l.*; South Tamar, 7*l.* to 7*l.* 5s.; Hingston Down, 14*l.*; United Mines, 190*l.* to 195*l.*; Wheal Basset, 750*l.* Among progressive mines, those most in demand have been—West Alfred Consols, 16*l.* to 17*l.*; Great Alfred, 31*l.* to 33*l.*; Marke Valley, 5*l.*; Great Baddern, 1*l.* 5s. to 1*l.* 10s.; East Tamar, 12s. 6d. to 15s.; Bell and Lanarth, 10*l.* to 11*l.*; Rorrington, 12s. 6d.; Wheal Messer, 100*l.*; Treweatha, 4*l.* 10s. to 5*l.*; Clijah and Wentworth, 7*l.* to 8*l.*; Harriett, 1*l.*; Tavy Consols, 3*l.* 5s. to 3*l.* 10s.; Uny, 11*l.* At the Wheal Basset meeting, on Tuesday, a dividend of 20*l.* per share, and a bonus of 5*l.* per share (altogether 6400*l.*), were declared from the profits on two months' working. This makes the 65th dividend paid by this mine, and the third bonus of 5*l.* per share. There are seven lodes in the mine—the principal of which, Gicsler's, is yielding 14 tons of rich ores per fathom from the ends. Paddon's lode, 7 tons per fm. from the ends, and 4 tons per fm. from rising. The other lodes are looking well. On the mine 756 persons are employed, 234 men on tutwork, 192 on tribute, 131 men at surface, 152 boys and girls dressing copper ores, and 47 in dressing tin.

In the Bullion Market,—Mexican and South American dollars, 5*s.* per oz. Bar silver containing gold, all gold above 5 grs. in the pound to be paid for, 5*s.* 1¾*d.* per oz. standard. Bar silver without gold, 5*s.* 1¾*d.* per oz. standard. Bar gold, 77*s.* 9*d.* per oz. standard. Spanish doubloons, 78*s.* 6*d.* per oz. Columbian doubloons, 77*s.* 6*d.* per oz.

At Wheal Basset meeting, on Tuesday, the accounts showed—Balance from the last account, 938*l.* 15*s.* 2*d.*; copper ore sold in Nov., 4745*l.* 0*s.* 4*d.*; Dec., 7055*l.* 3*s.*; tin ores, Dec., 335*l.* 12*s.* 1*d.*; Jan., 282*l.* 6*s.* 10*d.* (less dues, 827*l.* 17*s.* 5*d.*); discounts and materials sold, 11*l.* 13*s.* 2*d.*=12,540*l.* 13*s.* 2*d.*—Labour cost, Nov. and Dec., 3747*l.* 2*s.* 4*d.*; merchants' bills, 835*l.* 9*s.* 5*d.*; income tax, 214*l.* 4*s.* 10*d.*: leaving balance in favour of mine, 7743*l.* 16*s.* 7*d.*; from which deduct dividend of 20*l.* per share, and bonus of 5*l.* per share, 6400*l.*; together with labour cost at the south mine, Nov. and Dec., 269*l.* 13*s.* 4*d.*; merchants' bills, 109*l.* 15*s.* 2*d.*: leaves balance to next account, 964*l.* 8*s.* 1*d.* The nett profit for the two months was 6805*l.* 1*s.* 5*d.* The whole of the lodes (seven in number), with their numerous levels, cross-cuts, &c., running east and west of the various shafts, and numbering between 60 and 70, are all, more or less, productive—some, as the account shows, being exceedingly rich. As an instance of the extent to which this branch of British industry and enterprise is progressing, we may mention the fact, that there are 234 employed on tutwork, 192 on tribute, and 134 kibble-fillers, landers, engine, and other men on the surface; boys and girls dressing copper and tin ore, 199: making a total number of 756, exclusive of the men and horses employed to carry the ore from and the coals to the mine.

At the United Mines meeting, on the 1st inst., the accounts for Nov. and Dec. showed—Balance from last account, 970*l.* 11*d.* 1*d.*; ores sold (less dues), 9728*l.* 7*s.* 8*d.* = 10,698*l.* 18*s.* 9*d.*,—Mine costs and merchants' bills, 8993*l.* 13*s.* 3*d.*; by dividend of 2*l.* per share (800*l.*): leaving balance in hand, 905*l.* 5*s.* 6*d.*

At Wheal Exmouth and Adams United Mines meeting, on the 4th inst. (Mr. Thomas Hartnoll in the chair), the accounts showed—Balance last account, after deducting dividend on 4280 shares, at 2*s.* 6*d.* per share, 1412*l.* 9*s.* 5*d.*; lead ore sold, 2455*l.* 2*s.*; excess weight of ore last parcels, 5*l.* 5*s.* 5*d.*=3872*l.* 16*s.* 2*d.*; cost sheet for Oct. and Nov., 657*l.* 0*s.* 8*d.*; Nov. and Dec., 768*l.* 5*s.*; timber account, 155*l.* 15*s.* 6*d.*; dues, less returning charges, 183*l.* 17*s.* 5*d.*; discount on ore bills, City bank, 11*l.* 19*s.* 8*d.*: leaving balance in favour of adventurers, 2095*l.* 18*s.* 7*d.* The new accounts showed—Deposit on 856 shares, at 1*l.* per share, 856*l.*—Balance last account, 151*l.* 13*s.* 9*d.*; mine cost, Oct., Nov., and Dec., 139*l.* 2*s.* 7*d.*: leaving balance in favour of adventurers, 565*l.* 3*s.* 8*d.* An extension of the lease to 21 years has been procured, and 150 fms. of ground, south of the present south boundary, obtained for a sum of 1000*l.*, which amount being required to be paid immediately, the committee recommended a call of 4*s.* per share upon the whole of the shares (5136), in preference to suspending the dividend, the new shares being equally benefited by the grant as the original shares. The produce of the last two months was 162 tons. Operations had been resumed at Wheal Adams, and returns will be made in a short time. The Exmouth Mine was making large returns, and there was every prospect of a continuance. A dividend of 2*s.* 6*d.* per share was declared. Capt. James Hampton's report was highly encouraging.

At West Wheal Seton meeting, on Monday, the accounts for Nov. and Dec. showed—By ores sold (less dues), 2296*l.* 13*s.* 11*d.*—Balance from last account, 279*l.* 19*s.* 10*d.*; costs and merchants' bills, 1591*l.* 15*s.* 2*d.*: leaving balance in favour of adventurers, 424*l.* 18*s.* 11*d.*

At the Callington Mines meeting, on Tuesday (Mr. P. Stainsby in the chair), the accounts showed—Balance last account, 1389*l.* 7*s.* 11*d.*; mine cost, Oct., 480*l.* 11*s.* 5*d.*; Nov., 683*l.* 14*s.* 4*d.*; Dec., 446*l.* 5*s.* 5*d.*; balance of interest and discount, 47*l.* 3*s.* 11*d.*=3038*l.* 3*s.*—Lead ore sold, 881*l.* 12*s.* 5*d.*; copper, 219*l.* 7*s.* 3*d.*; spare materials, 483*l.* 7*s.* 1*d.*: call of 5*s.* per share, 1250*l.*: leaving balance against adventurers, 20*l.* 16*s.* 5*d.* The captain's report was very satisfactory, and Mr. Ensor expressed a high opinion of the future prospects of the undertaking. The mines are now paying more than the costs, and to meet the present balance there is nearly 600*l.* worth of ore sampled. A vote of thanks to the chairman concluded the business of the meeting, which is more fully detailed in another column.

At the Wheal Comford meeting, on the 3d inst., the accounts for four months ending Nov. showed—Balance from last account, 566*l.* 3*s.* 2*d.*; costs and merchants' bills, 1965*l.* 8*s.* 9*d.*=2531*l.* 11*s.* 11*d.*—By ores sold, 393*l.* 16*s.* 9*d.*; call in Oct., 563*l.* 3*s.*: leaving balance against adventurers, 1026*l.* 12*s.* 2*d.* A division of cost of 4*l.* 0*s.* 10*d.* per share was made.

At Bodcoll Mine meeting, on 23d Jan. (Mr. J. F. Saunders in the chair), the accounts showed—Balance from last account, 391*l.* 5*s.* 3*d.*—Mine cost, September, 148*l.* 16*s.* 9*d.*; Oct., 70*l.* 15*s.* 5*d.*; Nov., 34*l.* 16*s.* 7*d.*; bank charges, 1*l.* 3*s.*: leaving balance in favour of the company, 135*l.* 14*s.* 10*d.* A call of 1*s.* per share was made. Capt. Michael Barbery reported that the principal workings were chiefly made on what was termed the south or Frongoch lode, on which the deep adit level was extended east of the Rhydnet River 75 fms., which had passed through a lode varying from 6 ft. to 9 ft. wide, principally composed of quartz, gossan, mundic, and copper ore, intermixed with good quality lead ore. The present depth had a very promising appearance. Captain Barbery has every confidence in Bodcoll and Dalwen becoming profitable mines.

At the Great Cowarch Mine adjourned meeting, on Monday (Mr. C. Burls, jun., in the chair), it was resolved, upon the motion of Mr. J. W. Sherman, that the qualification of a committeeman be hereafter 100 shares. The resolutions of the last meeting were confirmed; and Messrs. Burls, Loader, Sunley, Downing, Sherman, Smith, and Whaley, were elected as the managing committee for the ensuing two months. Mr. W. H. Smith reported that 5 cwts. of the quartz out of the 21 cwts., transmitted by Capt. Northey to Messrs. Perkes and Co. by order of Mr. Sunley, had been in the presence of two of the committee subjected to the gold-crushing amalgamator; and that the result was 2 ozs. 16 dwts. 6 grs. to the ton. The thanks of the meeting were tendered to Messrs. Bird, Smith, Sunley, and Sherman, for the extraordinary exertions they have made in procuring the results laid before the meeting by Mr. Smith. Capt. Northey reported that the operations were progressing favourably, and that the stopes were still producing good saving work. A vote of thanks to the chairman terminated the proceedings.

At East Wheal Basset meeting, on the 1st inst., the accounts for six months, ending Dec., showed—Balance from last account, 277*l.* 12*s.* 7*d.*; costs and merchants' bills, 771*l.* 8*s.* 5*d.*=1049*l.* 1*s.* By call in July, 768*l.*: leaving balance against the adventurers, 281*l.* 1*s.* A call of 3*l.* per share was made.

At Wheal Crebor general meeting, held at Mr. Murchison's offices, in Threadneedle-street, on Wednesday, the accounts showed—Balance of cash in hand at last meeting, 95*l.* 6*s.* 7*d.*; calls received, 1194*l.* 6*s.* 1*d.*; copper ore, 470*l.* 8*s.* 1*d.*; carriage, 16*l.* 2*s.* 6*d.*; interest, 7*l.* 10*s.* 1*d.* = 1783*l.* 13*s.* 4*d.*—Costs, including merchants' bills, 1629*l.* 8*s.* 6*d.*; office expenses and committee, 37*l.* 17*s.* 10*d.*; interest, printing, &c., 21*l.* 7*s.* 10*d.*: leaving balance of cash in hand, 94*l.* 19*s.* 2*d.* The calls in arrear were 337*l.* 6*s.* 6*d.*; ore sampled, estimated, 300*l.*; carriage to be received, 21*l.* 14*s.* 4*d.* A call of 5*s.* per share was made. The expenditure for some time has been very heavy, owing to the erection of the new and extensive machinery, which is now complete, and works well. Captain Doble reports very satisfactorily of the general appearance of the mine and its prospects.

At Budnick Consols meeting, on the 3d inst., the accounts for Oct., Nov., and Dec. showed—Balance from last account, 293*l.* 8*s.* 3*d.*; costs, &c., 851*l.* 9*s.* 2*d.* = 1144*l.* 17*s.* 5*d.*—By ores sold (less dues), 624*l.* 13*s.* 8*d.*; call in Nov., 420*l.*: leaving balance against adventurers, 100*l.* 3*s.* 9*d.* A call of 10*s.* per 420th share was made.

At Hemerdon Consols general meeting, held at Mr. Murchison's offices, on Tuesday (George Moffatt, Esq., M.P., in the chair), the accounts showed a balance unexpended of 77*3l.* 16*s.* 2*d.* The purchase by the committee of a 33-inch cylinder steam-engine, adapted for pumping, hauling, and stamping, was confirmed, and it was anticipated that the same would be erected in three or four months from this time, when an opportunity will be afforded of sending to market the large quantity of tin said to be discovered at the mine. The committee reported that they had appointed Mr. James Wolferstan, of the Bedford United, South Tamar, and other mines, as manager of Hemerdon Consols Mine, and that they had succeeded in obtaining a valuable extension to the sett on the course of the lodes, the original one being very limited. They also considered that Mr. Wolferstan had acted wisely in postponing the commencement of vigorous operations until the winter and the short days had passed away, as the works, which for a time will necessarily be exclusively on the surface, can now be carried on much more economically. A 33-inch cylinder steam-engine, adapted for pumping, hauling, and stamping, had been purchased from Mr. West, the engineer, and it was expected to be erected, and in full work by Midsummer. Very satisfactory letters from Mr. Wolferstan, the manager, were read.

At the North Staffordshire Consols Mining Company first meeting, on Tuesday, the accounts showed—Cash received for shares, 1245*l.*—Expenditure for wages from June, 1853, to Jan. 14, 1854, 551*l.* 6*s.* 9*d.*; expenses of forming the company—viz., survey, law charges, rent of offices for one year, incidental charges, and 50*l.* paid to Messrs. Stanway and others for preliminary expenses, 194*l.* 11*s.*; merchants' bills, 141*l.* 4*s.* 1*d.*; superintendent's salary for six months, including travelling expenses, 136*l.* 10*s.*; Capt. Bonsall, three months' salary, 9*l.* 9*s.*; secretary, one year, to June, 1854, 60*l.*; travelling expenses to mines, 12*l.* 17*s.* 6*d.*: leaving balance, 139*l.* 1*s.* 8*d.* The general balance-sheet exhibited—Cash in hand, 139*l.* 1*s.* 8*d.*; calls unpaid on 120 shares, 30*l.* (12*l.* 10*s.* since paid); plant at the mines, 95*l.* 10*s.* 1*d.*; ore at surface, value 140*l.*—Liabilities for merchants' bills, 20*4l.* 8*s.* 4*d.*: leaving balance in favour of the mines, 200*l.* 3*s.* 5*d.* The usual notice of the meeting and the accounts having been read, a desultory conversation took place as to the future conducting of the mines, which resulted in the superintendent's report being referred to the committee of management, to deal with as was deemed best for the interests of the company. The report suggested driving two principal deep levels near the level of the River Manifold—one on Bincliff, the other on Eastern sett; the prolongation of Fallow's level to the copper shaft; sinking a winze on the Upper Neuk vein in Fallow's level, so as to intersect the line of the projected deep level; and to follow up clearing out and deepening the climbing roads and shafts at the high fields and overseits. Some specimens from the various lodes, intended for the inspection of those attending the meeting, did not arrive until the following day; they can, however, be seen at the office of the company, and consist of some highly interesting and extraordinary specimens of lead and copper ores.

At the Ballyhickey Mine meeting, held yesterday, at Salvador House, Bishopsgate-street (Mr. W. Dunsford in the chair), the accounts from Nov. 1852, to Dec. 1853, showed a balance against adventurers of 192*5l.* 1*s.* 2*d.*, which, after some discussion were, upon the motion of Mr. Ensor, seconded by Mr. T. Field, received, subject to audit. Mr. Ensor was at a loss to understand, and wished to know how it was that Mr. Samuel Wilkes, who was one of the promoters of the mine, and now held nearly one-half of it, was allowed to transfer a portion of his shares, being in arrear of payment of calls to the amount of 46*8l.* 12*s.* Mr. Stainsby said he had seen Mr. Wilkes only yesterday, and had advised him to attend the meeting, and regretted he was not present to answer for himself. He (Mr. Stainsby) laid before the meeting a letter from that gentleman, claiming certain sums for services rendered, but which the committee felt no disposition to allow. A shareholder thought Mr. Wilkes ought to be just before being generous; if he could afford, as had been stated, to contribute 500*l.* or 600*l.* to the Wesleyan Methodists, he ought to pay his debts. He quarrelled with no man for his religious principles, but when a party, professing such principles wilfully neglected a moral obligation, the world was apt to look upon him as an impostor. Mr. Field wished Mr. Wilkes's claim to be treated fairly, and that he should have credit for whatever he was entitled to. He would deal with him liberally, but he must, of course, produce vouchers before his claim could be allowed. It was perfectly true that Mr. Wilkes held nearly one half the mine, but he had not contributed one shilling towards the expenses. There was now an improvement going on in the mine, and it was most unfair that the shareholders should incur all the risk, and Mr. Wilkes come in and take the benefit of such improvement, without contributing his proportion of the expenses. After some discussion, it was resolved that a special meeting be called for the purpose of forfeiting all shares upon which the calls have not been paid.

At Charlestown United Mines meeting, on Thursday (Mr. James Reid in the chair), the notice convening the meeting was read, and a statement of liabilities and assets laid on the table. It was resolved that the resolution passed at the last meeting, increasing the number of shares to 15,000, be rescinded; that a call of 1*s.* per share be made, and that the meeting be adjourned until the 20th inst.

At East United Mine meeting, on the 2d inst., the accounts showed—Balance last account, 141*l.* 13*s.* 9*d.*; mine cost, Oct., 134*l.* 9*s.* 11*d.*; Nov., 85*l.* 7*s.* 11*d.*; merchants' bills, 188*l.* 9*s.* 3*d.*=550*l.* 0*s.* 10*d.*—Call of 2*l.* per share, 512*l.*: leaving balance against adventurers, 38*l.* 0*s.* 10*d.* A call of 10*s.* per share was made. The shares have been divided into 1024—four times the original number. The mine was reported to be looking very promising.

At Tresavean Mine meeting, on the 31st Jan., the accounts showed a balance of 66*8l.* 12*s.* against the adventurers.

At Pen-y-Gelli Mine meeting, on Thursday (Mr. James B. Fenwick in the chair), the accounts showed—Mine cost, Oct., 157*l.* 6*s.* 10*d.*; Nov., 154*l.* 9*s.* 1*d.*; Dec., 171*l.* 17*s.* 11*d.*=483*l.* 13*s.* 10*d.*—Balance last meeting, 24*6l.* 15*s.* 11*d.*; calls received, 70*l.*: leaving balance against mine, 146*l.* 17*s.* 11*d.* A call of 1*l.* per share was made. Capt. W. Michell, jun., reported that the lode in the engine-shaft, sinking below the 20, was 2 ft. wide, composed of carbonate of lime, hard and unproductive. The lode in the 10, driving east, was worth about 10*l.* per fathom for lead; this end had been poor, and the lode disordered for the past month, having been intersected by a cross-course, and thrown north, but was now looking very promising. They would sell, on the 9th, 100*l.* worth of lead, the produce of the 10, east of engine-shaft.

The Great Cambrian Mining and Quarrying Company have now in course of erection on their works at Maestryfar, near Dolgelly, the most powerful water-wheel in either North or South Wales; and our readers will be astonished when we tell them it is equal to 150-horse power. Crushing apparatus on an equally powerful scale is also being completed, and when at work will crush 60 tons of quartz per day. The company has, during the past week, shipped 9 cases of gold quartz for transmission to London, to be tested by all the patent and other processes for extracting gold; and we, together with the shareholders, look forward with much interest to the result of the experiments; while we must give the directors great credit for the impartial way in which they are acting, as this will be the means of thoroughly testing which is the most economical means of extracting gold from the matrix of the Welsh gold-fields.

At East Frongoch Mine meeting, held on Tuesday, at the offices of Mr. J. A. Joseph, Winchester-buildings (Mr. P. Crofton in the chair), the accounts showed a balance against the adventurers of 22*l.* 15*s.* 6*d.* A call was made of 5*s.* per share. It was resolved that notice be given to those whose shares have been forfeited, with an intimation that they will have the privilege of applying for their reservation of the same at the next general meeting. Capt. Barbery reported that, in the course of a week, they will resume the 20 cross-cut south.

At Wheal Friendship (St. Hilary) meeting, yesterday, it was stated that important discoveries had been made, and the lode recently cut in the adit could be worked on tribute at 4*s.* in 1*l.*

At the Craigwen Mine (near Dolgelly) meeting, on Wednesday, (the Rev. G. Pocock in the chair), it appeared, that after payment of all liabilities to Dec. 31, there was a balance in favour of the adventurers amounting to 37*3l.* 2*s.* The report of Captain Jones was read, which stated the several lodes were yielding ore, of which a considerable quantity was at bank, and many tons would be ready to crush very shortly. The discovery of gold in the quartz of the adjoining mines gave rise to some discussion, and two members of the committee are about to visit the mine, who will bring back with them some serpentine and quartz from this property, which is in the same range of hills as the Cwmheisian and Prince of Wales Mines, and is known to be auriferous. Some seven years since Mr. Mitchell assayed the ore from this mine for silver, and found gold also, but from the expensive process of extraction then adopted, it was not deemed of sufficient importance to warrant any further investigation. Berdan's and Perkes's machines, however, have now so greatly facilitated crushing operations, that the shareholders are desirous of having it fully tested.

At Wheal Mary Emma meeting, on the 1st inst. (Mr T. H. Armitage in the chair), resolutions were passed, absolutely forfeiting all shares in arrear of calls; also that the company should be brought to a close, and the plant and materials sold by public auction, to discharge the liabilities, and divide the balance amongst the remaining shareholders. At a subsequent meeting, held on the 4th inst., the resolutions were unanimously confirmed, and, as on the former occasion, a vote of thanks given to the chairman, for the interest he took on behalf of the adventurers.

Newtonards, Foxdale, Maesyrerwddu, Coetia Llys, Deep Level, Talacre, Merllyn, Pen-y-Galli, Garreg, Holywell Level, Pantyffrith, Plantation, Bodelwyddan, Ty-Maen, Ballygoneen, Aberfrwyd, Pentire Glaze and Penture United, and Loveden United, have sold lead ore.

Bosorn, Great Beam, Wheal Augusta, Great Polgooth, Wheal Uny, Yeoland Consols, Devon West Beam, West Wheal Towan, Budnick Consols, and Trebell, have sold black tin.

Great Wheal Vor United Mines sold this week 18 tons black tin, producing 1160*l.*, showing an increase, notwithstanding

At Ivy Tor Consols Mine, the miners dug into a "chamber of crystals, as varied for beauty as the scenes in the late Crystal Palace." They have also cut into a lode of bismuth and cobalt, and the general prospects of the adventure are reported to be most satisfactory.

The gossans of the Devon Consols North Mines have been tested by Berdan's machine, giving a result of 15 grs. of gold to the cwt., or 12½ dwts. to the ton; but as a quantity of earthy matter was crushed therewith, it is anticipated that on a more particular trial, the yield of gold would be greater. The gossan is very abundant in the adit level.

Wheal Harriett continues to improve. The lode in the engine-shaft is now 16 in. wide, containing rich copper ore.

At Lamherooe Wheal Maria, the 40 fm. level east and west has a promising appearance, and more men have been put on, to expedite the trial of the mine at this point.

At Devon Kapunda Mine, the agent reports that the lode in the 34 fm. level west is improved both in size and character; the ground continues just the same for driving. The whim-shaft is being cut down about 28 ft., and the men are timbering it, preparatory to further proceeding with their contract.

At Devon and Courtenay Consols, the lode in the winze in the bottom of the 80 fm. level is not looking so well as last week. The lode in the western end, in this level, is producing some good stones of copper ore and tin.

Referring to the Irish Consols Mining Company, in last week's Journal, we stated the produce of gold, from one of the experiments made by Mr. Berdan's machine, under the superintendence of Prof. Ansted, on the quartz from this company's property, to be equal to 1 oz. 2 dwts. 10 2-11 grs. per ton; it should have been 1 oz. 9 dwts. 4·2 grs., as will be seen by reference to the tabular statement furnished by the professor, and which appears in page 66 of the Journal. We understand that the directors have, in accordance with the resolution adopted at their general meeting, on the 31st inst., ordered one of Berdan's machines, with Professor Ansted's improvements, and a crusher attached, which is to be delivered on board the Cork steamer, at Liverpool, for transmission to the mines, within three weeks. This will fully test the value of the quartz upon the company's property.

The directors of the Beacon Mining Company have had their gossan tested for gold by Messrs. Perkes, and Co., of Walbrook. The result is highly favourable; as, from a fair sample of 1 ton of gossan, the yield, according to Messrs. Perkes's certificate, is at the rate of 2 ozs. 10 dwts. 5 grs. of fine gold per ton. The product was distilled and assayed by Messrs. Simpson and Maule, and the result was as above stated. Arrangements will be made with the Bissoe Pulverising and Amalgamating Company, for the purchase or reduction of the Beacon gossan; and as there is every facility for the transmission of the ore to the Bissoe Works, at a small cost, great results are anticipated. The gossan lode is ⅛ mile long on the course of the sett, several fathoms deep, and from 3 to 6 feet wide. Two men can raise—and have done so—2 tons per day, with the ordinary tackle now on the mine; and as there are three shafts on the course of the lode, large quantities can be made at once available. Several samples of the gossan yielded a much larger return of gold per ton; but the above is the fair and undoubted average of the bulk: about 50 tons of gossan are now at surface. The clay works on the sett, belonging to this company, are also progressing admirably, and paying at the rate of 25 per cent. upon the outlay thereupon; so that it is believed, with the important adjunct of gold, the Beacon Mine will speedily be in a first-rate position. Mr. Calvert, the celebrated gold discoverer, has pronounced a strong opinion as to the gold formation on the Beacon Hill, the leasehold of this company; and the fact of gold having been found in this and the adjoining sett, practically tested by Berdan's and Perkes's machines, gives authenticity to Mr. Calvert's statement. The make of china clay on the works is now nearly 100 tons per month; and the production of this important and staple article of commerce will be largely increased during the ensuing year, as every facility in the way of water for washing, pits, pans, drying-houses, &c., is amply provided for.

The Great Cambrian Mining and Quarrying Company's shares have again been extensively dealt in; they have now reached ⅝ premium, and appear to be unusually well held.

Considerable business has been done in the Welsh Potosi shares, which have changed hands freely at ¼ and ⅜ prem.

During the week, shares have changed hands in Alfred Consols, Bedford United, Bat Holes, Callington, Condurrow, Dhuroote, Dolcoath, Drake Walls, Great Devon Consols, Lewis, North Wheal Basset, Rorrington, South Caradon, South Tamar, St. Aubyn and Grills, South Tolgus, Tincroft, Tamar Consols, Treweatha, United Mines, West Caradon, West Providence, West Basset, West Goginan, Wheal Buller, Wheal Clifford, Wheal James, Wrysgan Slate, Bulleswidden, Birch Tor, Bryn-arian, Carbona, Caradon Wood, Castle Dinas, Clara, Clijah, Clive United, Cook's Kitchen, Cubert, Darren, Welsh Potosi, Devon Burra Burra, East Tamar, Great Cowarch, Great Crinnis, Great Wheal Baddern, Hingston Down, Kilbricken, North Damsel, North Towy, North Wheal Trelawny, Polgear, Trannack Consols, Trebell Consols, Treloggan, Treloweth, Tyn-y-Berth, Union, West Par, West Wheal Buller, Wheal Gusgus, Wheal Uny, Wheal Zion, Angarrack Consols, Arundell Copper, Britannia, Bodcoll, Devon United, Dinas Great Copper, Great Hewas, Herodscombe, Great Sheba, Hope Valley, Devon Tin, Ivy Tor, Penilyne Court, Sortridge Consols, Red Dragon, South Towy, Tremollett Downs, West Wheal Friendship, Wheal Fanny, West Wheal Jane, Wheal Peru, Kenmare, Wicklow, Mining Company of Ireland, Lackamore.

In Foreign Mines, the fluctuations have been unimportant. Metcalfes remained stationary, at ½ to ⅝ prem.; Sue River of Jamaica, ¼ dis. to par; Fortuna, ½ to ¾ prem.; Jamaica Copper, ¼ to ⅜ prem.; Port Royal of Jamaica, ⅜ to ⅝ prem.; Rhenish Copper, par to ¼ prem.; Cobre Copper, 44¼; Royal Santiago, 4¼ ¾; Imperial Brazilian, 5½; St. John del Rey, 29¼ ⅝. Yesterday, Cobre shares improved 1/., closing at 45 to 46. The West Indian securities were generally steady, with little business doing at the following quotations:—Clarendon of Jamaica, ⅜ to ¼ prem.; Sue River, ¼ dis. to par.; Metcalfes, ⅜ to ⅝ prem.; Jamaica Copper, par to ¼ prem.; Port Royal of Jamaica, ⅜ to ⅝ prem.; St. John del Rey, slightly improved, closing at 30. Imperial Brazilian, 5 to 6; National Brazilian, 1¾ to 2½; Fortuna, ½ to ¾ prem; Cologne Lead, ½ to ⅝ dis.; Royal Santiago, 4 to 5; Rhenish Copper, par to ¼ prem.; Iberian Mining, ⅛ to ⅜ prem.; San Fernando Silver-Lead, ½ dis. to ⅛ prem.

The United Mexican Mining Association have advices to the 30th Dec., which will be found in another column. The work in the pozo of San Albino had been discontinued, to avoid danger to the workmen in the shaft. A fatal accident in each of the neighbouring mines of San Vicente and Los Locos had rendered unusual caution necessary. No variation had occurred in the price of quicksilver since last reported: the stock in use was—at Barrera, 7607 lbs. 6 ozs.; at Dolores, 6755 lbs. 1 oz.: total, 14,362 lbs. 7 ozs.

The Linares Mining Association have advices to the 31st Jan. The various tutwork bargains being measured for work done in Jan. were set for Feb. The tribute pitches had been all taken, and the appearance of that department continued favourable. Ore weighed in the 28th Jan., 75 tons 5 cwts.

The New Linares Company have received advices, bearing date 28th Jan., which confirm the satisfactory advance previously reported. At San Roque, No. 2 shaft is down about 18 fms. from surface. At No. 3 shaft, the end in the 20 fm. level west is at present yielding from 1½ to 2 tons of ore per fm. Both ends east, in the same level, on the course of the main lode, and on the course of the south-east branch, are looking promising, but are not at present producing ore to value. The winze under this level is down about 7 fms. No. 4 shaft is collared up, and the sinking of the same has re-commenced. The Cristo del Valle main shaft continues sinking rapidly. The lode in the shaft sinking eastward below the 12 fathom level has improved since last report.

The Royal Santiago Mining Association have advices to the 4th Jan. The ore broken in Dec. came from the stopes east and west of Taylar's shaft, between the 44 and 50 fathom levels. East of the shaft there was still a good lode, averaging 6 tons of ore per fm. Ore raised in Dec., 71 tons; precipitate, 4 tons.

The Iberian Mining Company have received advices from their mining engineer in Spain. The No. 1 mine is a splendid lode, giving from 5 to 20 in. of absolutely clean lead. The No. 5 mine (copper) is entirely a newly-discovered lode in the clay-slate formation, and presenting a very favourable appearance. It can be traced for a considerable distance over the hill, and lies in good ground for working.

The Rhenish Mining Company have advices from Capt. Richards to the 31st Jan. At Rhonard Mine, the new shaft they expected would be communicated with the shallow adit in two months. On the Funderbeck lode, driving east, the lode has very much improved, and is producing good copper ore. At Kesseling Mine, the working operations are going on most satisfactorily. The lode in the north adit has improved, and is at present 5 ft. wide, bearing good copper ore towards the bottom of the end.

The Grand Duchy of Baden Chartered Mining Company have received advices to the 2d inst. In the winze sinking under Trudpert's level, No. 5, the lode is 15 in. wide, producing 18 cwts. of ore per fm. In pitch No. 22b, the lode is 15 in. wide, worth 1 ton of ore per fm. During the month of Jan. they raised 16,600 cwts. of rough ore, which will produce 33½ tons when dressed. They have now upwards of 6300 tons of rough ore at grass, estimated to produce about 240 tons when dressed. At the foundry they have 2¾ tons dressed.

From the Pontgibaud Mines, the agent's report, dated the 4th inst., is very favourable. Several lodes have been intersected by the cross-cuts, producing ore of good quality. A rise in the back of No. 5 level, in Rosier is producing 2½ tons of rich silver lead ore per fathom. No. 3 level, driving north, is yielding 2½ tons of rich ore per fathom from a lode of great promise. A rise in the back of this level is turning out 5 tons of rich ore per fathom, and the lode appears to be standing whole to the surface. The report of the mine of Roure is also favourable. The dressing apparatus is in a forward state, and a good sampling of ore is expected about April next.

The Colonial Gold Company have received advices from Mr. Thomas Corner, their superintendent in Victoria, dated 2d Nov., 1853, per *Ballarat*, from Melbourne. Mr. Corner advises that an early trial will be made upon the stuff obtained from the workings at Lower Bendigo, and that for the moment Ballarat and the Ovens are favourite spots. Some washing stuff found in the bottom of the cutting will give about 17 dwts. to the load of soil. Mr. Corner writes that samples, the produce of a prospecting pan, have been weighed; and without actually weighing the stuff itself, the yield is found to be 3½ to 7½ dwts. per load of 65 tubs; and if the machine with two buddles will wash 100 loads per diem in the manner he hopes, he sees no reason why a yearly profit of from 16,000 to 18,000*l.* may not result; and also in reference to the experimental trials in sinking at Specimen Hill, he writes, the ground is altogether changed and much more kindly; and the experiment is of the greatest importance, as it will at once decide him as to all future quartz workings, if the vein in the 20 fm. level is found to be promising. A rich coal-field is reported to have been discovered at the western point. The *Ballarat* brings 481 ozs. of gold-dust, consigned to the company.

The Yuba River Company have received a letter from their agent, Mr. Levason, dated 27th December, from the company's property, recently purchased by him. This property consisted of two acres, and he had partially secured two other claims: his intention was to continue his purchases, as the soil which he had tested contained an average of 30 cents. per pan of 25 lbs.—viz., four times richer than the property on the Bar. The following extract will show what he had effected up to that date:—"I have had much to contend with since I came up, and am but just got to work with my sluices. In the first place, I had to cut a race through the solid granite of 400 yards long, 24 feet deep, and 14 feet wide, before I could put up my sluice. I have had a shanty built, and to-day is my first day of inhabiting it. I shall be able, I have no doubt, to make a handsome dividend on all the outlay," Mr. Levason did not purpose to visit the Sierra Nevada before April or May, by which time it was expected the snow will have left the mountain. The agent does not state what amount of gold there was in hand, but he intended to visit San Francisco at the end of January; he proposes to delay any remittance until that period.

The Garnett and Moseley Gold Mining Company have received, per *Africa*, which arrived at Liverpool from New York on the 3d inst., 219 ozs. 7 dwts. of gold in bars, the produce of these mines in Virginia.

Although there has been scarcely any increase of business in the Gold Mining share market this week, the tone has been firmer, and prices have in some instances slightly improved; the chief feature has been in Agua Fria shares, which touched to 1¾ prem., but quickly relapsed: the shares of this company are, however, still in leading favour. Anglo-Californians have slightly rallied, and are now a shade better, though, as we have previously stated, no marked amelioration in these stocks will take place until actual returns are made; and, although the absence of information is to be deprecated, yet at present with regard to these associations it would appear to have a salutary effect,—as it may be remarked, that on the receipt of a favourable report from the local agents, a depression invariably takes place in the shares; the continued delays, the number of excuses coming perpetually to hand, has in a great measure caused the public to lose confidence in this description of securities, and which can only be re-assured by the arrival of the precious metal. The interest which for some time has been felt with regard to Gold in England has somewhat diminished in intensity; this, however, is probably only a temporary lull, as soon as the working qualities of the several machines are practically tested, there is but little doubt that the question will be set at rest, and the problem of the probability of extracting gold to pay in Great Britain solved. The burning of quartz, containing arsenical pyrites, which was mentioned some time since in our columns, has been successfully adopted in California; and, although new there, has long been successfully tried in the Hartz, Erzgebirge, Mansfield, Roraas, and Fahlun. As will be seen elsewhere, the quantity of gold on the aggregate appears to be on the increase, both in Australia and California; this, though obtained in general in the rudest manner, appears to give ample returns, while, where all the appliances of science are brought to bear, there seems a reckless expenditure without any profit. There are, however, exceptional cases, but the general rule would appear that there is something radically wrong in the constitution of these ill-fated companies. The *Ballarat* has arrived from Port Philip with 92,000 ozs. of gold, of the value of 368,000*l.* The transactinos on the Stock Exchange will be found in the usual place. The non-official are—Lewis Hill Range, ⅞ to ⅞ dis.; Golden Mountain, ⅜ to ½ dis.; Australian Mutual, ⅞ to ⅞ dis.; Garnett and Moseley, par to ⅛ pm.; Melbourne Gold, ⅞ to ⅞ dis.; Chartered Australian Land and Mining, ⅞ to ⅞ dis.; Australian Consols, ⅝ to ⅞ dis.; London and Virginia Gold, ¼ dis. to par; Chancellorsville Freehold, ⅛ dis. to par; Albion Gold, 15-16 to 13-16 dis.

We have news from California to the 31st Dec., by which it appears the total shipment of gold dust to all quarters, for the year 1853, was $51,906,956 74, which was shipped as follows:—For New York, $47,914,447 68; New Orleans, $390,781; London, $4,795,662 25; Panama, $793 10; Valparaiso, $445,778 27; Sandwich Islands, $194,000; China, $926,134 44; Manilla, $17,450; Calcutta, $1240; New South Wales, $38,670. The returns show a decided improvement over those of any previous year, the shipment for 1851 being $34,492,000, and for 1852, $45,779,000. At the different mints there were coined in 1851, $55,937,232; in 1852, $53,952,567; and in seven months of 1853, to July 30, $39,754,469. The difference between the amounts is the result of dust in the hands of passengers. The yield of gold in the aggregate has increased, and within the past year the number of persons engaged directly in mining is believed to have been no greater than during the year 1852. Mining labour has been pursued more scientifically, and the gold is found at a greater depth from the surface than at any previous period: hence mining labour is better rewarded. The total product of the mines since the discovery was estimated at $260,000,000. Tunnelling was coming more and more into practice. In several cases, by this system, the ancient beds of rivers and gulches had been discovered under the hills, and found to be very rich. The news from the Klamath was very favourable. New diggings had been found on one of the eastern head branches of the Sacramento. The Pilot Creek Canal, a work some 20 miles in length, which was intended to furnish water to some of the richest and most extensive dry diggings in the State, was progressing rapidly, and would soon be completed. The *Placer Times* gives the following information respecting arsenical pyrites among the quartz:—"In an article, written by a skilful geologist, the existence of arsenical pyrites among the quartz in our mines was mentioned as the cause of much of the annoyance and discouragement that have been experienced in this kind of mining. A recent discovery, however, by Mr. Plattner, has had the effect in a measure of removing this difficulty. The discovery is a very simple affair: it consists in roasting the quartz in a reverberatory oven—a process by which the arsenic is entirely driven out, leaving the iron, gold, and sand, upon the bottom of the oven. An experiment was tried upon an article considered worthless, and found to contain gold, estimated at $35 to $40 to the ton."

From Australia, we have news to the 5th of Nov. The Sydney *Gold Circular* states that the Turon diggings were very quiet at the date of the latest intelligence, the dry weather being anxiously expected. The number of licenses issued in October had been upwards of 1000. There was an increase of miners at Tambaroora, and a large quantity of gold was offered for sale thence. The escorts brought in on the 2d Nov.—from Bathurst, 72 ozs.; Sofala, 666 ozs.; Tambaroora, 67 ozs.; Meroo, 256 ozs.; Braidwood, 183 ozs.; Major's Creek, 156 ozs.; and the Sydney Gold Escort Company from the Ovens 5225 ozs.—making a total of 6626 ozs., value about 24,000*l.* The market was firm, and gold was quoted at 77s. to 77s. 3d. for Victoria, and 74s. 6d. per oz. for New South Wales. Export to this date (Nov. 3), 1,522,361 ozs., valued at 70s. per oz., equal to 5,278,263*l.* 10s. The Melbourne *Gold Circular* of the 5th Nov. reports that Bendigo had recovered, and produced the usual weekly average. The escorts brought from Mount Alexander and Bendigo, 28,440 ozs.; Ballarat, inclusive of Geelong, 7332 ozs.; M'Ivor and Goulbourn, last week, 2221 ozs.=37,993 ozs. Gold shipped from Victoria in 1853, 2,047,673 ozs.; per *Ballarat* to London, 90,311 ozs.=2,137,984 ounces; or 89 tons 14 cwts. 1 qr. 7 lbs., at 75s. per oz., 8,017,440*l.*

The *Ballarat* has arrived from Port Philip, whence she sailed on the 11th of Nov., with 70 passengers, and 92,000 ozs. of gold, valued at 368,000*l.* The production of gold appears to be going on steadily, although the escort returns for the month just ended contrast very unfavourably with those of Oct. 1852, when the outpourings from Mount Alexander had created general excitement. The total of the month this year was 156,166 ozs., against 364,172 ozs. in the corresponding period of last year. The circumstance, however, was considered exceptional, and no doubts appear to have arisen as to the general average of each year showing a steady increase, in the same way as in California. An alleged discovery of coal at a place called Cape Patteson, on the coast, had attracted attention, and a party had been organised to test its value, but it was believed to be merely a revival of an account published some years ago. From Van Diemen's Land the dates are to the 3d Nov. The reward of 15,000*l.* for the discovery of a profitable working gold field was being advertised, the subscription having been made up by 145 merchants of Hobart Town and Launceston.

In Miscellaneous Shares, the market opened at improved quotations. In Australian Agricultural business was done on Monday at 44; Crystal Palace, 6¼ to 6¼: North British Australasian, 1; Peel River, 5 to 4¾; Scottish Australian Investment, 2½. These prices were generally supported, closing yesterday as follows: —Australian Agricultural, 41 to 43, ex. div.; Berlin Water-works, 1¼; British American Land, 70 to 75; Netherland's Land, 3 to 2 dis.; North British Australasian, ⅛ dis. to ¼ prem.; Peel River, ¼ dis. to par; South Australian Land, 37¾ to 8¼; Van Diemen's Land, 13 to 14. In Joint-Stock Banks, Australasia left off yesterday at 77½; Chartered Bank of Asia, 2¾; Chartered Bank of India, Australia, and China, 1 to ¾ dis.; English, Scottish, and Australian Chartered, 7¾; London Chartered Bank of Australia, 15⅛; New South Wales, 44½ 45; South Australia, 39; Union of Australia, 67¾ 7, ex. div.; Ditto New, 7¼, ex. div.

In Iron and Coal Companies, during the week, business has been done at the following prices:—Rhymney Iron, 28 to 30, ex. div.; New ditto, 8 to 10; Portland Iron, ¼ to ½ prem.; Blaenavon Iron, 11; British Iron, 7 to 9, ex. div.; Cumberland Hematite Iron Ore, ⅞ to ½ dis.; Australasian Coal, ½ to ¼ dis.; New South Wales Coal, ¾ to ½ dis.; Mount Carbon Coal, ⅝ to ¾ dis.

The half-yearly dividend to the 31st December, at the rate of 7 per cent. per annum, is advertised as payable on the shares of the General Iron Screw Collier Company on the 15th inst.

At the annual meeting of the trustees of the Swansea Harbour Trust, on Monday, by a majority of nine, it was decided that the bill for the further improvement of the harbour should be prosecuted in the House of Commons. There is every probability that a number of the clauses will be opposed in committee; we reiterate the hope, that not only the members for the county, but likewise all concerned in the copper trade, will oppose the levying of an additional toll on the mineral industry of a large portion of the kingdom. There are other sites than Swansea, where the copper and other metal trades can be established; and it may be well that, in these progressive times, the Trust and the Corporation of Swansea should remember how exactions have rendered comparatively prosperous towns deserted villages.

At the Midland Waggon Company first half-yearly meeting, held at the offices of Messrs. Hoyle and Marsh, solicitors, Rotherham, on the 3d inst. (Mr. George Wilton Chambers in the chair), the accounts showed—To amount due to sundry persons, 3069*l.* 5s. 6d.; ditto on loan and interest, 5045*l.* 17s. 10d.; amount due to shareholders, &c., 5290*l.* 8s. 9d.; balance of revenue account to the 31st Dec., 293*l.* 3s. 6d. =13,698*l.* 15s. 7d.—By amount due from sundry persons, 309*l.* 14s. 1d.; preliminary expenses in formation of company, 364*l.* 6s. 8d.; waggon stock (226 waggons at cost price), 12,449*l.*: leaving balance (cash in bank), 575*l.* 14s. 10d. The report of the directors congratulates the proprietors on presenting so satisfactory a balance-sheet, taking into consideration the short time the company has been in operation. Applications for additional waggons, at increased rates and for long leases, were being daily received, showing that the principles upon which the company was formed were satisfactory, not only to the directors, but to the contracting parties generally, and affording relief to the rapidly increasing railway traffic of the country. The number of waggons now let were 319, producing on an average 645*l.* per annum. As the majority of the waggons had been at work for so short a time, the directors thought it desirable to postpone any declaration of dividend until the next half-yearly meeting, but assured the proprietors that the future prospects of the company were most satisfactory, and would eventually prove highly remunerative.

Under the Winding-up Act, the settlement of the list of contributories of the "Northern and Southern Connecting Railway Company" is to be proceeded with on the 15th inst.; a petition for the winding-up of the "Bituminous Shale Company" is to be heard on the 20th inst.; and the official manager of the "Newcastle-upon-Tyne Marine Insurance Company" is to be appointed on the 18th inst.

A New Metal.—A very remarkable discovery was announced to the Academy of Sciences, by M. Dumas, at its last sitting. He stated that M. Saint Clair Deville had succeeded in obtaining from clay a metal as white and brilliant as silver, as malleable as gold, and as light as glass; it is fusible at a moderate temperature. Air and damp do not affect this metal, which is called aluminium; it retains its brilliancy, and is not affected by nitric or sulphuric acid, either strong or diluted, if the temperature be not raised. It is only dissolved by very hot chlorhydric acid. Several specimens of this metal were exhibited to the Academy, and on the proposition of Baron Thenard, it was voted unanimously that a sufficient sum should be placed at the disposal of M. Saint Clair Deville to enable him to make experiments on a large scale.

Trannack and Bosence Mine.—At the Stannaries Court, in the cause Noell *v.* Cannan and others, a decree was made against the defendants, who were the assignees of George Hennett, a bankrupt, directing 10 shares to be given up for sale, in default of payment of 105*l.* 2s. 6d., being costs owing on the shares.

Ballyverghan (Co. Clare).—A rich vein of lead and copper has been lately opened at this place in the carboniferous limestone formation. If it continues as rich as it now promises, it will be a source of great wealth to the company.

Rathlahim (Co. Clare).—Mr. Townsend, of Dublin, having made a favourable report of the mineral indications at this place, it is expected that a company will shortly go to work there.

LEAD ORES.

Sold at Douglas, Isle of Man, on the 27th January, and 3d February.

Mines.	Tons.	Price per ton.	Purchasers.
Newtonards	100	£15 7 6	Walker, Parker, & Co.
ditto	16	17 5 6	Panther Company.
Foxdale	100	16 15 6	J. P. Eyton.

Ticketings at the White Horse Hotel, Holywell, February 9.

Maesyrerwddu	53	£15 16 0	J. P. Eyton.
ditto	52	15 15 0	Walker, Parker, & Co.
Coetia Llys	38	16 7 6	ditto
Deep Level	40	14 6 0	ditto
Talacre	40	15 12 6	ditto
Merllyn	23	14 17 6	ditto
Pen-y-Gelli	6	14 12 6	Newton, Keates, & Co.
Garreg	6	14 0 0	Walker, Parker, & Co.
Holywell Level	28	15 14 0	Newton, Keates, & Co.
Pantyffrith	9	14 14 0	ditto
Plantation	18	15 15 6	J. P. Eyton.
Bodeiwyddan	47	15 11 0	Walker, Parker, & Co.
Ty-Maen	6	15 4 6	Newton, Keates, & Co.

Sold on the 9th February.

Ballygoneen	10	£14 18 6	Sims, Willyams, & Co.

Sold on the Mine.

Aberfrwyd	10	£15 4 0	Sims, Willyams, & Co.
Pentire Glaze and Pentire United	40	21 14 0	—
Loveden United	20	18 2 0	—

BLACK TIN.

Sold on the 30th January.

Mine.	Tons	c.	q.	lb.	Price per ton.	Amount.	Purchasers.
Bosorn	0	19	1	2	£81 12 6	£78 12 6	—Bolitho.

Sold on the 3d February.

Great Beam	0	17	0	13	£88 0 0	£75 6 2	—New Blowing.
ditto	0	17	3	1	75 0 0	66 11 11	— ditto
ditto	0	12	3	15	72 15 0	46 17 3	— ditto
ditto	0	2	3	15	70 0 0	10 1 10	— ditto
ditto	0	2	1	3	61 12 6	7 0 3	— ditto
ditto	1	4	0	10	88 0 0	105 19 10	—Higher Blowing.
ditto	1	1	3	9	75 0 0	81 17 3	— ditto
ditto	0	14	3	15	72 15 0	54 2 9	— ditto
ditto	0	1	0	2	75 0 0	3 16 4	— ditto
ditto	0	0	2	15	73 0 0	35 3 3	— ditto
Wheal Augusta	2	2	3	11	79 0 0	169 5 0	—Bolitho.
ditto	0	6	3	7	42 0 0	14 13 6	— ditto

Sold on the 2d February.

Great Polgooth	8	11	0	24	£78 0 0	£ 667 14 8	—Daubuz.

Sold on the 6th February.

ditto	7	15	1	9	£78 0 0	£ 605 15 9	—Enthoven.

Sold on the 4th February.

Wheal Augusta	0	7	0	25	£73 0 0	£26 7 3	—Mellanear Co.
ditto	0	1	2	13	35 0 0	2 16 6	— ditto
Wheal Uny	4	9	0	16	76 2 6	—	—

Sold on the Mine.

Yeoland Consols	3	2	1	11	£78 12 6	£245 2 1	—Union.
Trebell	1	9	0	8	80 0 0	116 5 8	— —
ditto	0	3	2	18	69 0 0	12 12 7	— —
Devon West Beam	1	0	0	0	75 7 6	75 7 6	—Calenick Co.
ditto	0	15	0	0	73 0 0	54 15 0	—Williams.
ditto	0	5	0	0	38 5 0	9 9 0	—Calenick Co.
West Wh. Towan	7	0	0	0	80 0 0	560 0 0	—Enthoven.
Budnick Consols	4	6	1	9	83 5 0	—	—Daubuz.
ditto	2	5	1	12	78 15 0	—	—ditto.
ditto	0	10	2	24	47 5 0	—	—ditto.

COPPER ORES.

Sampled January 25, and sold at Andrew's Hotel, Redruth, February 9.

Mines.	Tons.	Price.
Wheal Buller	134	£10 2 6
ditto	133	6 17 0
ditto	120	5 12 6
ditto	112	4 18 0
ditto	110	5 12 0
ditto	107	5 19 6
ditto	94	4 16 0
ditto	84	7 7 0
ditto	71	8 3 0
ditto	60	8 19 6
ditto	50	8 5 0
ditto	44	5 19 6
ditto	26	2 10 6
Carn Brea	93	4 13 0
ditto	73	3 6 0
ditto	70	5 12 6
ditto	67	14 7 0
ditto	60	6 3 0
ditto	51	3 6 6
ditto	50	3 12 6
ditto	49	6 0 0
ditto	2	42 0 0
West Basset	85	6 2 6
ditto	78	4 14 6
ditto	76	10 11 0
ditto	67	11 14 0
ditto	44	11 15 0
ditto	24	3 8 0
ditto	16	9 12 6
United	105	4 14 6
ditto	87	4 14 6
ditto	62	2 0 0
ditto	60	1 9 0
ditto	46	2 17 0
ditto	21	13 2 6
Par Consols	80	9 11 6
ditto	79	6 3 6
ditto	76	12 12 0
ditto	40	6 2 0
Alfred Consols	61	11 4 0
ditto	58	10 12 6
ditto	46	13 12 6
ditto	39	14 0 6
ditto	29	4 3 6
ditto	13	24 10 6
North Basset	67	3 11 0
ditto	42	12 0 0
ditto	36	6 15 6
ditto	35	5 16 6
ditto	20	9 13 6
West Treasury	62	7 9 0
ditto	41	5 2 0
West Treasury	37	£5 11 0
ditto	36	9 17 6
ditto	24	4 9 0
Halamanning, &c.	70	6 19 6
ditto	56	5 1 0
ditto	54	5 3 6
ditto	8	3 15 6
Pemb. & East Crinnis	58	5 13 6
ditto	50	11 14 0
ditto	45	5 7 6
ditto	20	2 9 0
South Crenver	56	3 6 0
ditto	52	4 1 6
ditto	32	3 3 6
West Wheal Seton	40	4 3 0
ditto	39	6 14 0
ditto	32	2 3 6
ditto	32	16 15 0
Botallack	78	12 13 0
ditto	38	10 13 0
Levant	52	2 3 0
ditto	44	7 0 6
Wheal Trebarvah	35	5 15 6
ditto	21	10 4 6
ditto	15	4 3 0
Carvannall	55	9 17 6
Wheal Abraham	36	1 2 0
ditto	13	0 2 0
Wheal Speedwell	31	6 13 0
ditto	15	2 16 6
Wheal Charlotte	23	7 1 6
ditto	12	15 9 0
ditto	11	15 7 6
St. Aubyn & Grylls	43	6 2 6
Wh. Carpenter (Gwin.)	22	1 2 0
ditto	14	3 15 6
ditto	7	2 16 0
Camborne Consols	31	14 2 0
ditto	2	7 14 0
Wheal Guskus	30	7 15 6
Kenneggy	26	7 17 6
Wheal Tehidy	24	5 14 0
Trelyon Consols	15	2 10 0
ditto	4	15 9 0
ditto	1	63 7 6
Gwallon	17	3 7 0
Polgooth	12	8 2 0
Wheal Agar	11	10 12 0
Wheal Grenville	8	2 13 0
Wellington	6	11 11 6
Sydney Godolphin	6	5 3 0
Copper House Slag	2	1 2 0

TOTAL PRODUCE.

Wheal Buller	1145	£7673	14	6	Wh. Speedwell	46	£248	10	6
Carn Brea	515	3126	7	6	Wheal Charlotte	46	517	5	0
West Basset	390	3227	9	6	St. Aubyn & Grylls	45	275	12	6
United Mines	381	1524	18	6	Wh. Carp. (Gwin.)	43	96	13	0
Par Consols	275	2455	8	6	Camborne Cons.	33	452	10	0
Alfred Consols	246	2913	1	6	Wheal Guskus	30	233	5	0
North Basset	200	1383	2	6	Kenneggy	26	204	15	0
West Treasury	200	1338	13	0	Wheal Tehidy	24	136	16	0
Halamanning, &c.	188	1080	14	0	Trelyon Consols	20	162	13	6
Pemb. & E. Crinnis	173	1205	0	6	Gwallon	17	56	19	0
South Crenver	140	498	6	0	Polgooth	12	97	4	0
West Wh. Seton	129	789	8	0	Wheal Agar	11	116	12	0
Botallack	116	1391	8	0	Wheal Grenville	8	21	4	0
Levant	96	420	18	6	Wellington	6	69	9	0
Wh. Trebarvah	71	479	2	0	Sydney Godolphin	6	30	18	0
Carvannall	55	543	2	6	Copper House Slag	2	2	4	0
Wheal Abraham	54	41	8	0					

Average Standard ..... £149 2 0 | Average Produce 6½
Average Price per ton £8 18 6
Quantity of Ore ..... 4749 tons | Quantity of Fine Copper, 307 tons 14 cwts.
Amount of Money £32,814 13 0
LAST SALE.—Average Standard ..... £150 17 0.—Average Produce 5⅞
Standard of corresponding sale last month, 149*l.* 0s.—Produce 6½.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal Company	440	£2029 18 3
Vivian and Sons	698	4511 18 4
Freeman and Co.	380	2461 12 3
Grenfell and Sons	549	4694 14 0
Crown Copper Co.	17	226 5 0
Sims, Willyams, Nevill, and Co.	503	3170 10 11
Williams, Foster, and Co.	772	5886 12 0
English and Australian Company	419	2951 19 4
Mason and Elkington	550	3705 1 3
F. Bankart	42	504 0

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

THE CRUSHING MACHINES.—SIR: In order to prevent mistake, in reference to the two-basin machine manufactured under a license from Mr. Berdan, and with my modifications, by Messrs. Cox and Wilson (of Oldbury) for Cwgwin Mine, near Dolgelly, allow me to state that, although the machine is ready, it will be impossible that it should be at work for some weeks, owing to the inclemency of the weather, which has prevented the water-wheel, leats, foundations, &c., from being prepared, and the necessary sheds erected.—D. T. ANSTED: *Manchester-st., Manchester-sq., Feb.* 6.

LONDON AND CALIFORNIAN GOLD QUARTZ CRUSHING COMPANY.—SIR: I am a holder of some shares in this company (not an original holder); will any of your correspondents inform me if I can sue either of the directors for the 1*l.* per share paid? and if so, could I take out a summons from the County Court in this city. Your inserting this will oblige several readers.—O. W. H.: *Bristol, Feb.* 7.

GOLD DISCOVERIES.—SIR: Being satisfied, from experiments and assays of the gossan, that gold exists in a certain Cornish mine wherein I have a very large interest, and wishing to have a larger quantity operated upon, can either of the patent machine makers, or any other party, inform me, through the medium of your valuable Journal, when they will be in a position to try, say from 5 to 50 tons, and what will be the probable cost?—A MINER: *Chacewater, Feb.* 6.

MINING IN SALOP.—SIR: Being in a position to answer your correspondent's ("Caution") query with certainty, I can inform him that the leases of mines in Shropshire usually give landlords the power of resumption he mentions. There are some exceptions, but as it might appear invidious to name them, I would advise your correspondent to obtain an inspection of the lease before he invests, as otherwise he may, through the misfortune of a fellow-adventurer, forfeit his title. He may be told that no landlord would take advantage of such a clause; but those who have studied "common things" know very well how parties act when self-interest is concerned.—A LESSEE OF SALOP MINES: *Feb.* 8.

SITHNEY WHEAL BULLER (BREAGE).—SIR: Will any of your numerous correspondents be kind enough to inform one interested in the success of this adventure—1. Whether a report which has reached me is true, that this mine is, what with outstanding bills and otherwise, deeply in debt?—2. How it is that sinking has been stopped, and the water at this moment is above the 40 fm. level, in spite of a new engine, which we were told was to carry us down to any required depth?—3. What loss or gain (?) has been experienced in returning the little tin hitherto sold?—4. When the extraordinary dividends, promised with so many flourishes, are to be forthcoming?—5. And, likewise, whether the mode in which the mine is now managed will not insure it being "knocked" at no distant date? and, as a consequence, should the answer to these be in the affirmative, which is almost incredible, whether we cannot recover our subscriptions in full?—A COUNTRY SHAREHOLDER: *Feb.* 9.

"Z. Z." should write to Mr. F. W. Campin, the patent agent, of 156, Strand, who will readily answer any communication soliciting information.

"W. C." (Kemp Town).—It is a mistaken notion that all the gold mines in the Ural Mountains are the property of the Emperor of Russia: several of them belong to private individuals, the Countess Porlier being one of the largest proprietors. There is no doubt that should the Czar require their produce he would take it, giving in return Government securities, which are not in great credit, even in Russia, though the people are, when it is the Autocrat's will, forced to take them.

"J. D." (Dublin).—The offices of the Knockatrellane Mining Company are removed to Cannon House, Queen-street.

GOLD MINING IN AUSTRALIA.—SIR: If "Nulla Fides," instead of making attacks on Mr. Calvert, will read that gentleman's book, he will find that Mr. Calvert has satisfactorily answered all the points alleged, and is open to no charge of inconsistency. Those who have found gold ores on their property will be the best able to judge whether "Nulla Fides" is right in his opinion, that there is gold nowhere. —IMPARTIAL: *Feb.* 8.

"A Subscriber" (Hammersmith).—The offices of the Eyam Mining Company are at Sheffield, where a letter should be forwarded, addressed to the secretary.

"Tyro" (Liverpool).—Many masses of native iron are scattered over the continent of North America, as in Louisiania, and still further north, in the countries inhabited by the Esquimaux; several specimens also occur in Africa, as in the Senegal River and near the Cape of Good Hope. With the exception of the Siberian variety mentioned by Pallas, and a mass lately noticed in the Atacama desert of Peru, both of which had a vesicular appearance, and contained straw-yellow coloured olivine, native irons have uniformly presented a solid structure.

"C. W. F." (Leeds) can ascertain the particulars he requires of any mine broker.

COLONIAL GOLD MINING COMPANY.—SIR: Can any of your readers inform me what this company is doing? Whether, when the last meeting of shareholders took place, the balance-sheet and accounts were submitted, together with the usual directors' report; and what are the general prospects of the company?—A DISTANT SHAREHOLDER: *Bangor, Feb.* 7.

"C. G. F." (Leeds).—Those shareholders who register their scrip with the attorney, and thereby authorise him to commence proceedings, although they may be entitled to any benefits that may accrue, will likewise render themselves proportionately liable for any costs that may be incurred. As the company, though professing to be on the Cost-book System, is not legally constituted, both original shareholders and directors, as well as those who have since purchased the shares, have been acting illegally; and it is questionable whether by litigation any thing could be recovered. The most prudent course for all parties would be to arrive at some compromise, which we understand the directors are willing to entertain.

"F. F." (Cornhill).—It is no new discovery; the burning of quartz to get rid of the arsenical pyrites contained in it, was adopted at the Alten Copper Works in 1837, and since has been used in Germany and France; the Quartz Rock Company now use it at their works; and the account of the practical manipulation has on several occasions been published in the *Mining Journal*.

AUSTRALIAN AGRICULTURAL COMPANY.—Your correspondent, "Vigil," is quite right: we do not get the profit we ought out of our sheep and cattle farming. I have said so publicly ever since I have been a shareholder. I calculate at least 50,000*l.* is annually lost to the company, by neglect or something else; and the reason is plain—because the management is left to agents. It is true we have a superintendent-general (Capt. Brownrigg), but unless he had the power of ubiquity, how is it possible he can adequately superintend a vast estate of a million of acres, in three separate locations, hundreds of miles apart? The consequence of this system is (as may be expected), a wretched dividend. What, then, is the remedy for this profitless mode of carrying on the affairs of the company? Why, to let our land on short leases, as the South Australian Land Company have so successfully done. This plan, as well as a local board in Australia, was suggested to the directors at the public meeting. With our new governor, Mr. Ravenshaw (who is a man of great ability), and two new directors, Sir M. Farquhar and Mr. Edwards (of Australian experience), I trust such an impetus to our affairs will be given, that we shall not continue to be the slowest and most unprofitable of the three old Australian companies.—A SHAREHOLDER: *Piccadilly, Feb.* 9.

"A Victim" (Leeds), should write to Mr. C. Hancock, 20, Tokenhouse-yard, with full particulars, and he will advise as to the best course of procedure.

"H. B." (Bath).—The prospectus of the company was issued, but it was never proceeded with. At the time of its formation, the lease question between Colonel Frémont and the companies was mooted: those who had obtained a sufficient amount of capital remained, but a number, among whom this was one, fell to the ground.

MINING IN SALOP.—SIR: In reply to the query of your correspondent, "Caution," in last week's Journal, I beg to state, as secretary of the South Bog Mine Company, that the lease of this valuable property does not contain the very objectionable clause regarding bankrutcy. I am quite aware that few (if, indeed, any) other leases are exempt from it; and it would be well, therefore, that all adventurers should make a point of seeing that the leases in this locality do not contain the objectionable clause, before they invest their money.—THOMAS FULLER.

Mr. R. W. Townsend proceeds in a week to the north of Ireland, to report on some mines there, and may be communicated with by letter, addressed to his office, No. 2, Henrietta-street, Dublin.

QUARTZ CRUSHING.—SIR: I regret very much that the inadvertent omission on my part of the baptismal prefix to the name of Mushet ("*clarum et venerabile nomen*") in a letter of mine, which appeared in the Journal of the 21st Jan., should have led Mr. David Mushet to the erroneous impression that he was the gentleman indicated and alluded to in it, and I take this, the earliest opportunity which presents itself, of assuring him that at the time of inditing that communication I was perfectly innocent of any intention to pay him the compliment therein bestowed, and that it was meant exclusively for Mr. R. Mushet, who, I repeat, has, in a mineral point of view, conferred so much benefit on the science of the day. Mr. David Mushet, in his letter to you, and which elicits this reply, has stated that "'Justin' misrepresents him as a supporter of the crushing quackery, which numbers the names of the most notorious mine jobbers in the kingdom, and he conceives this to be a calumnious imputation upon him." I confess, Sir, that I do not understand what is here meant by the "crushing quackery" in connection with Mr. Mushet, or his letter, to which he refers me, nor do I know anything of the jobbing propensities of the supporters of this mineral charlatanism, to which he alludes; but what I said in my letter in reference to Mr. R. Mushet, and quoting from his letter, was that "all that lies between the walls of the lodes will be found pretty nearly equally productive of gold, not excepting copper." And, again, "there is plenty of raw material to operate upon, but the difficulty lies, and ever will lie, in the profitable extraction of the gold." To this I give my entire and unqualified approval; and I think it will require a very powerful stretch of imagination indeed to distort those passages into a desire to connect Mr. David Mushet with the "crushing quackery," or to calumniate any one in the world; but some men are "born great," and others have "greatness thrust upon them," and if in his regard I have erred, I throw myself upon his tender consideration, and promise never more to offend him.—JUSTIN.

"H. J." (Southampton) should apply to some respectable mine agent: we cannot give the advice he requires.

NOTICE TO SUBSCRIBERS.—In order to lessen the amount of our correspondence respecting the subscription to the *Mining Journal*, we insert the following, for the information of our readers generally, but more especially those residing in foreign countries, from whom we are constantly receiving complaints, that they cannot obtain the Journal regularly. Though always recommending that it rather be obtained through some bookseller or agent, we supply the Journal direct from our office at 1*l.* 6*s.* a year, which must, in all cases, be paid in advance, by post-office order, or draft on demand on a house in London, in favour of Wm. Salmon Mansell, as acting for the proprietors. And as regards foreign subscribers, with the addition of the postage payable in England, we also give the amounts necessary to be added for postage to a few of the principal countries, for their guidance:—Italy and Portugal, 8*s.* 8*d.*; Holland, 4*s.* 4*d.*; Spain, 2*s.* 2*d.* (no other parts of Europe require postage); Australia and New Zealand, 4*s.* 4*d.*; United States, British North America, and the Falkland Isles, 4*s.* 4*d.*; Foreign West Indies, California, and Mexico, 8*s.* 8*d.*; Chili, 17*s.* 4*d.* (the British West Indies and those parts of South America not named above require no postage); Africa (British settlements), 4*s.* 4*d.*; other parts, 8*s.* 8*d.* The subscription for the year must be forwarded so as to be receivable in England before the expiration of that for the preceding year, or the paper will not be continued. English subscribers can pay half-yearly in advance, if preferred.

We have particularly to request that subscribers and others, in paying accounts, will send cheques or post-office orders, in preference to postage-stamps.

WHEAL VYVYAN.—SIR: Can any of your readers inform me whether there is anything doing at the Vyvyan Mine, in Cornwall? Any information respecting the mine will prove very acceptable.—C. W. E.: *Clifton, Feb.* 8.

ON THE EXTENSION AND ACCESSIBILITY OF THE GREAT COAL FORMATION BENEATH THE SECONDARY STRATA OF ENGLAND,—BY JOSEPH HOLDSWORTH, ESQ.

ON THE METALLIFEROUS VEINS, OR LODES, OF DEVON AND CORNWALL, AND THE METHODS OF MINING THEM,—BY GEORGE HENWOOD, ESQ.

These two important papers will be published in next week's Journal.

*** It is particularly requested that all communications may be addressed—
TO THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.

Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, FEBRUARY 11, 1854.

The motion of Mr. COLLIER, on Tuesday night, in the House of Commons, for leave to bring in a bill to extend the jurisdiction of the Stannaries Court, to define and regulate the Cost-book System of mining, and to limit in some degree the liability of parties in cost-book mines, gave rise to an interesting and important discussion. The principles enunciated are not new to the readers of this Journal; and the hon. Member in referring to the system of limited liability, which in early days had raised Venice to an unprecedented state of commercial importance—which had afterwards enriched Holland—which had been approved of by the most eminent French jurists, and had been adopted in the United States of America, fully sustained the views we have so often expressed in favour of its extension in these countries. He justly observed that all the greatest works of the age connected with our railways and navigation by steam, were in effect the results of breaches of our common law of partnership; and enquired whether the Birkenhead Docks would ever have been built, or the Menai Straits bridged over, if Parliament in the formation of companies had not rescinded the rigid rules of our ancient jurisprudence? It was conceded in the course of the debate, that the principle of unlimited liability was felt to bear peculiarly hard on mining operations; it tended to deter persons of capital and respectability from embarking in such enterprises, and by handing them over to adventurers rendered them in many instances mere speculative contrivances to deceive the public. While Mr. COLLIER admitted that the principles he advocated, tending as they did to place mining schemes on a more solid foundation, were fitted to embrace the entire kingdom, we regret to find that the hon. Member proposed to confine his bill to Devonshire and Cornwall alone. Every argument which he advanced showed the advantages to be expected from extending the principles of the measure to every part of the country; and even those attached to antiquated authorities, and whose prejudices in favour of ancient habits induced them still to cling to general liability, seemed to admit that if there was to be any exception, it ought to be in favour of mining associations.

During the debate, it was very properly urged by Lord GODERICH, that the power conferred on the Board of Trade, of granting at its pleasure charters of limited liability to some bodies, which were denied by the common law of the country to others, was wholly indefensible. We complained in our last Number of the capricious power vested in that Board of virtually granting and continuing monoplies; but that objection would be entirely removed, if limited liability were permitted and sanctioned by Legislative authority, under defined conditions to those, who should be willing to submit to and abide by them. The reasoning we have so often adopted was repeated in Parliament, that the present defective state of the law operated with great harshness on parties advanced in life who had become opulent, and who, being willing to retire from active business, were desirous of confiding to others the future management; and the evil was further illustrated by the impediment it created in the way of the poor man, anxious to associate with him individuals possessed of means to carry out an invention, which he was himself unable to prosecute. There seemed, also, to be an impression very generally felt, that the proposed measure would tend materially to diminish disputes between capital and labour, and by promoting the interests of the working classes, bind more closely together both masters and workmen than any other means which could be devised. Opposition was, of course, indirectly hinted by the jealousy of capitalists; but such opposition is little likely to prevail in an age, and in a country, in which the doctrines of free trade, and free competition, have proved so eminently successful. The principle seemed to be generally acknowledged, that that structure of society is most likely to be prosperous and lasting which rests upon the broadest basis, and comprises the most extensive classes of the community.

The members of the Government who were in the House during the discussion, acknowledged that there was no objection to the introduction of the bill, confined as it was to extending and improving the jurisdiction of the local courts in the counties of Cornwall and Devon; but, they observed that the debate had taken a wider range, for that the question of limited liability had been introduced. The House was then reminded, that on the recommendation of one of its own committees, a commission, consisting of eminent legal and commercial men, had been appointed to investigate the subject in all its bearings, and that they were now engaged in prosecuting their enquiries. It was, therefore, to be understood, that in sanctioning the first reading of this local bill for Cornwall and Devon, Parliament was not to be considered as passing any opinion on the graver questions still under the consideration of that commission. Liberty was then given to bring in the bill, but there seemed to be a kind of general feeling, that the presentation of the report of the Commissioners of Parliament would be followed by more extended legislation.

We are opposed to half measures; and if the principle of this measure is approved of, we cannot well understand that any sufficient reasons exist, should it become law, for confining its operation to the two counties we have named. They are selected as having been the original seats of the Stannaries Courts, a jurisdiction still almost confined to Cornwall, although there were Stannary Courts of ancient origin in Devonshire which have fallen into desuetude. It is conceded that to Cornwall we are indebted for the Cost-book System, now administered so satisfactorily in the Stanneries Court of that Duchy; but if the Cost-book System has been by common assent extended to other parts of the kingdom, we confess that we cannot see any sound reasons for not equally extending the equitable jurisdiction exercised by the Stannaries Court. It may be almost inferred, from the tone of the recent debate, that many of the speakers assumed, we think erroneously, that cost-book companies cannot have a legal existence beyond the county of Cornwall. Referring to this subject, Mr. WORDSWORTH, in the new edition of his very valuable work on mining and other companies, which has just issued from the press, observes that an important question arises, "whether a company for working mines elsewhere than in Cornwall must be registered under the 7th and 8th Vic., cap. 110, and be formed by Deed of Settlement, in conjunction with that statute, or whether parties may adopt for such a company what are called Cost-book Regulations. Opinions on this point, of a contrary nature, are said to have been expressed by experienced and learned members of the profession, so that the law may be considered as doubtful, and as standing in need of a judicial declaration" (p. 188). The conclusion, however, at which Mr. WORDSWORTH has arrived is in accordance with the generally received opinion, that a cost-book mining partnership may be established *elsewhere* than in Cornwall; in other words, that mining associations under the Cost-book System are perfectly legal in other districts of the kingdom; and, if legal in any other, it necessarily follows that they are equally legal in all.

If, therefore, the jurisdiction and practice of the Stannaries Court have been found useful for the due administration of Cost-book companies in Cornwall, can any sound reason be assigned for not extending both to the other districts into which Cost-book companies have been themselves extended, and in which they are equally legalised? The Stannaries Court possesses a mixed jurisdiction, legal and equitable; the Civil Bill Courts in Ireland, presided over by the assistant barristers, have always exercised similar powers. We have, in England, the County Courts in full operation; the machinery is, therefore, complete for extending the principles of the Stannaries Court in respect of mining associations formed on the Cost-book Principle to every district of Ireland as well as of England. It was stated by authority in the debate, that his Royal Highness, Prince ALBERT, the Lord Warden, in making the appointment of the present Vice-Warden, had stipulated that, in the event of the jurisdiction of the Stannaries Court being extended from Cornwall to Devonshire, he should undertake the additional duties without any increase of salary. We hope that the Government has shown similar foresight and regard to the public interest, in making the same arrangements with the legal gentlemen, whom they have appointed to judicial situations in the local courts.

We deny that separate legislation for different districts is consistent with sound policy; and we had, on Tuesday night, an important statement from Mr. MOFFATT, as to the efficient working of the Cost-book System, as well as of the Stannaries Court. That honourable member observed, "that the proposed bill, although limited in the extent of its operation, would probably be found of very great utility within that sphere. Speaking on behalf of his constituents, who were largely interested in mining operations, he could state to the House their anxious desire that the system of administration of justice, as practiced in the Stannary Courts of Cornwall, should be extended to the neighbouring county of Devon. It has been found that the Stannary Courts of Cornwall secured to the mining interests in that county cheap and speedy justice—that most of the disputes which arose in mining affairs were of so peculiar and technical a nature, that exclusive of the very considerable expense and delay involved by appeals to the superior courts, there was also the heavy disadvantage of those courts being entirely unacquainted with the usages and technicalities of the mining districts. The jurisdiction of the Stannary Courts had formerly been in operation in Devon and Cornwall conjointly; therefore that portion of the bill of the hon. Member for Plymouth wisely restored an ancient practice, that was proved to be beneficial in its operation. With regard to the Cost-book System, his hon. friend had explained its meaning and uses to the House in so clear and succinct a manner as to leave little to be said in that regard (hear, hear); but it was remarkable that a system which obtained in the working of so important a branch of the national industry as the great mining interests of the United Kingdom, should never have received the authoritative sanction of the Legislature. (Hear, hear.) The Cost-book System was not to be found developed in our statute-book; it was, he believed, only once named, and that incidentally, in an Act of Parliament. From a system which had thus been created from mere usage, without any well-defined guiding principles, and frequently contingent upon the exigencies of the moment, many contradictions and great uncertainty were naturally to be expected; in fact, in many of the most important subjects, in regard to mines working upon the Cost-book System, it was impossible to know what were the laws and usages of that system. Most contradictory conclusions were constantly arrived at, and great uncertainty on many vital points was the predominant characteristic of the Cost-book System. He trusted all this would be remedied by the bill of his hon. friend. The subject would be found well deserving the attention of the House, when the rapid increase in this important branch of the national wealth was taken into consideration. He (Mr. MOFFATT) found from some returns which had been placed in his hands, that in copper *alone* the increased production of Devon and Cornwall had been most extraordinary. In the year 1729 the total production was something over 2000 tons, valued at 15,000*l.* Forty years later this had increased to 26,000 tons, valued at 260,000*l.* In the year 1800 this large increase was more than doubled, being 56,000 tons, yielding in that year 550,000*l.*; while in the year 1852-3 the quantity obtained was equivalent to 180,000 tons, realising the large sum of nearly 1,200,000*l.* sterling in that year. (Hear, hear.) This result was obtained from copper *only*, raised from *two* counties; these two counties were rich in other minerals; and he had only stated the results in this one item to give to the House some indication of the importance of the interest for which it was now proposed to legislate. (Hear, hear.) From what had fallen from his honourable friend, the Member for Plymouth, he gathered that his amendments of the Cost-book System were intended to be applicable only to Devon and Cornwall; if so, he thought this was much to be regretted. The large mining interests of Wales, Ireland, Derbyshire, Cumberland, and Westmoreland were, he believed, generally worked upon the Cost-book System, and ought to have the advantage of any benefit to be derived by the proposed enactments. In reference to the third question of the bill, he was of opinion that the application of the principle of limited liability might, under prudent restrictions, be safely made in the mining interest; but if the person was released, it might probably be needful to give a more prompt and summary power over the stock and chattels of the adventurer to the creditor. (Hear, hear.) He cordially seconded the motion for the introduction of the bill."

Concurring as we do most fully in the propriety of the measure proposed by Mr. COLLIER, as quite in accordance with the views we have repeated and urgently advanced, we cannot avoid expressing an anxious desire that when Parliament shall be called upon to legislate generally on the subject, a measure, extending its provisions to all the mining districts of the empire, may be brought forward under the authority of Government.

We have the satisfaction of laying before our readers the following important information on the subject of the gold discoveries and the Crown. It appears, that on the 21st Jan., Mr. MURCHISON addressed a communication to Mr. MOFFATT, M.P., relative to the discovery of gold in a mine in Devonshire, and requested the Hon. Member's assistance and advice under the following circumstances:—

"A portion of the ore of this mine," writes Mr. Murchison, "having been tested by Berdan's machine, a small quantity of gold has been found: the proprietors are desirous, before incurring any further expense in searching the ore for gold, of ascertaining whether the Crown asserts any right or royalty in regard to either gold or silver when found in combination with ore containing other minerals, beyond those contained and reserved in the 1st of William and Mary, cap. 30, and 5th of William and Mary, cap. 6? I have to request that you will be so good as to bring this case under the notice of the Lord Commissioners of Her Majesty's Treasury, or the proper authorities, and ascertain whether any Crown rights, beyond those above enumerated, are alleged to exist."

On the following day, Mr. MOFFATT enclosed the above letter to the Treasury, and remarked as follows:—

"I believe 'the proper authorities' will have no difficulty in deciding that the Crown has no rights, beyond those specified in the enclosed; consequently, the main object of this communication is to get the question (which appears to me to have been somewhat uselessly raised) now set at rest."

To this letter Mr. MOFFATT has received the following reply:—

Treasury Chambers, Feb. 7.

"SIR,—Having laid before the Lords Commissioners of her Majesty's Treasury your letter of the 21st ult., enclosing another communication from Mr. Murchison, dated the 20th ult., enquiring whether the Crown asserts any right or royalty in regard to either gold or silver, when found in combination with ore containing other minerals beyond those contained and reserved in the 1st of William and Mary, cap. 30, and the 5th of William and Mary, cap. 6, I am commanded by their lordships to acquaint you that the prerogative rights of the Crown extend to all mines of gold and silver, and that these are usually termed royal mines.

"The exercise of the Crown's prerogative is, however, restrained by the Acts above-mentioned, as amended by the Act 55th of George III., cap. 134, by which several enactments it was declared that all mines of copper, tin, iron, or lead, then or thereafter to be discovered, and being in the possession of a subject, should remain in such possession, notwithstanding that the said mines should be claimed to be royal mines. But it was expressly provided that the Crown should be entitled to the pre-emption of the ore of all such mines (other than tin ore in the counties of Devon and Cornwall) upon paying to the proprietors of the mine or mines wherein such ore might be found, within 30 days after the ore should be raised and laid upon the bank, the undermentioned rates, viz.:—For all ore, washed and made clean and merchantable, wherein there is copper, 16*l.* per ton; ditto, tin, 2*l.*; ditto, iron, 2*l.*; ditto, lead, 25*l.*

"By these enactments the Crown's perogative rights are only affected in cases where gold and silver are found in combination with copper, tin, lead, or iron, and the precious metals may be worked in these cases without a license from the Crown. But if gold and silver are found in a virgin state, secreted in rocks, or in combination with any other metals or minerals than those specified in the Act referred to, then the perogative rights of the Crown remain in full force, and the precious metals can only be legally worked under a license to be granted under the authority of a warrant from this Board, in conformity with the provisions of the Land Revenue Acts.

"A license of this description has been recently granted to Mr. Mansell to search for gold within the property of Lord Poltimore, in the parish of South Molton, county of Devon, and other applications of a similar character are now the subject of negociation with the departments of her Majesty's land revenue.

"A question is at present under the consideration of that department as to whether it might not be beneficial both to the Crown and the adventurers that, in lieu of the right and pre-emption to which the Crown is entitled under the Acts referred to, the Crown should receive a certain royalty, or proportional part of the value of the gold and silver when found in combination with other metals; and my lords desire me to refer you to the Hon. Charles Gore, the commissioner in charge of the land revenue, as to the terms on which a license to work the precious metals can be granted to them.

"G. Moffatt, Esq., M.P.," &c. "JAMES WILSON.

The concluding paragraph of this important and interesting communication appears slightly at variance with the one preceding; but when taken together, they seem to us to leave no doubt as to what the views and intentions of Her MAJESTY'S Government really are in regard to this question: it is clear to us that it contemplated no interference in regard to discoveries of gold in mines opened, or now working, for tin, copper, lead, or iron, unless where gold should be found in such enormous quantities as to induce the Crown to act on its right of pre-emption in the purchase of the ores: the gentle invitation to open negociations with the Hon. CHARLES GORE, may safely be declined or unheeded by all mining adventurers, except those fortunate parties who have made discoveries similar to those on Lord POLTIMORE'S lands. We believe that the Crown will take no

notice of any presumed right arising from these old and arbitrary Acts, unless the matter is forced upon the Government by the miners themselves, by continued applications on the subject. The mining interest is much indebted to Mr. MOFFATT, the hon. Member for Ashburton, for elucidating this satisfactory settlement of the question.

In our Journal of the 11th of November last, we entered into somewhat lengthened details, descriptive of an invention by Mr. FREDERICK S. THOMAS, of No. 17, Cornhill, in reference to a matter which, in the present state of society, perhaps more than any other, interests the community, and comes home "to the business and bosoms of men." We allude to his proposed Patent Safety Railway Carriages, intended to prevent in future such frightful sacrifices of human life as have so frequently taken place upon the railways, in consequence of the collisions of trains and other accidents.

We have been this week favoured with a view of the correspondence which has taken place between the inventor and the noble Earl at the head of Her Majesty's Government, and also between him and the Board of Trade, the department to which the management of railways is peculiarly confided. The correspondence is too lengthy for immediate insertion in our columns, but the vast importance of the subject renders us anxious to be the first to lay its principal features before the public. In Mr. THOMAS's first letter to the Earl of ABERDEEN, bearing date the 16th of January last, he earnestly calls his attention to the fact, that the great railway companies, to whom the lives of millions are entrusted, have become the chartered carriers of the kingdom, and that the numerous fatal accidents which have been recorded prove that this mode of transport, on which all classes, from the highest to the lowest, depend, "is undoubtedly defective, exceedingly dangerous, and has proved itself to be extensively destructive to human life." Mr. THOMAS then very justly observes, "that the inventive faculties of scientific men have been awakened, numerous plans have been proposed and adopted, exhibiting the application of improved signals, and of a better construction of breaks for the more rapid arresting of trains;" notwithstanding which the writer, we fear correctly, anticipates that accidents will hereafter more frequently take place, as the lines are more affected by the wear and tear of heavy trains passing over them. Mr. THOMAS then remarks, that amidst the accumulated inventions which have been proposed as precautionary measures, no person has yet attempted to meet the difficulty at its fountain-head, or contemplated the possibility of constructing such a class of railway carriages as would be capable of insuring perfect safety to passengers in the event of collisions or other casualties. While he admits that such a scheme has been declared to be visionary and impracticable, he unhesitatingly asserts that he has invented such a carriage, and is prepared to submit it to any Government authorities who may be appointed for the purpose of inspection and examination, freely avowing, at the same time, that there cannot be any effectual remedy for the evil, except in the indestructible nature of the carriage itself.

While boldly presenting for public adoption an entirely new system, Mr. THOMAS avows that he does not despise the multiplication or improvement of signals, nor repudiate the use or improvement of breaks, but proposes to provide a train of carriages capable of affording perfect protection to their occupants in cases of collisions or accidents similar to those which have hitherto proved so fatal. So confident did Mr. THOMAS feel in the perfection of his project, that he proposed to Lord ABERDEEN to proceed with the construction of a train of his carriages, without any charge to the Government or to any of the railway companies, merely requiring to test its merits by permission to place a full train of his vehicles upon any one of the present lines, and to submit them to the same casualties which have hitherto proved so destructive. He concluded by expressing his conviction, that if his carriages were brought into operation, they would be found ultimately more economical to the companies and to the public than any hitherto constructed, and tend to cause railway shares to be a profitable investment for money.

An official communication from Downing-street, dated 19th Jan. last, acknowledged the receipt of Mr. THOMAS's letter by Lord ABERDEEN, and stated that it had been forwarded to the Board of Trade, to which department the consideration of the question referred to in it more properly belonged. This was followed by a letter from the railway department of the Board of Trade, dated Whitehall, 21st Jan. last, stating that the Lords of the Committee of her MAJESTY'S Privy Council of Trade *not having the power to enforce upon railway companies the adoption of inventions which are made on the subject of railways*, they could not undertake to investigate and decide upon the comparative merits of those inventions. They further added, that the best method of getting the invention adopted would be, to bring it under the attention of those who are practically engaged in the construction and management of railways, and the machinery connected therewith.

Mr. THOMAS appears to have followed up this official recommendation, by repeating his proposal to the directors of all the leading railway companies having termini within the metropolis, and we trust that the matter is now receiving their deliberate attention. Our readers are aware that amongst the earliest notices given since the meeting of Parliament of measures intended to be brought forward by the Government, was one of a proposed Bill by the President of the Board of Trade for the prevention of railway accidents. Mr. THOMAS immediately availed himself of this intimation by calling Mr. CARDWELL's attention to the subject; and we cannot avoid expressing a very decided opinion that any law to be now passed, should confer upon the Government department, to whose control the lives, not only of her MAJESTY herself, but of the great mass of her subjects are confided, a power which it avows it does not at present possess, of enforcing upon railway companies the adoption of inventions, and of deciding and determining upon their comparative merits.

Our readers cannot have forgotten that a committee of the House of Commons, in 1826, specially reported against the practicability of railways to be worked by locomotive engines, and that the human race are indebted for the vast revolution which they have produced in our social, commercial, and national relations, to the intellect and perseverance of such a mind as that of STEPHENSON. This memorable example, without reference to the varied marvels of modern art, ought to deter us from doubting the practicability of any proposed invention or improvement; and Mr. THOMAS is entitled to have the results of his energy, ingenuity, and intelligence, fully and fairly tested. It is a reproach to our legislative jurisprudence, that the Government should acknowledge itself so helpless, as to be unable to estimate the value of inventions designed for the protection of the lives of her MAJESTY'S subjects; and the sooner that department is invested with proper powers, the more tranquilised will the public mind become, when assured of due attention to their interests, and fair protection to their lives, from the authorities of the State. Every casualty is certain to give full activity to the officials of the Board of Trade; they are sure to arrive after the mischief has been effected; but we believe the public would prefer to see those functionaries engaged in the prevention of calamities, rather than in furnishing long *posthumous* reports as to their obvious causes and tragic consequences.

We do not, of course, form any opinion as to whether Mr. THOMAS's project will prove successful or not; but this we say, that he seems in earnest, and instead of palliatives, he has proposed to grapple manfully with the evil. All he claims is fair play; and this, or the national character is greatly changed, he must have in England. His proposal to the united railway companies is one on which they must not hesitate; pitiful prejudices, or the interested motives of boards, or officials, must not be permitted to interfere with the security of the public; even if all the present railway carriages of the kingdom were pronounced and condemned as unsafe and insufficient, their value ought not to weigh a feather in the scale against the lives of individuals and the happiness of families. The proposition of Mr. THOMAS cannot be shelved by the railway directorates: they must either accede to it, or assign to the world satisfactory reasons for declining its acceptance. In the event of a refusal, what justification has the Board of Trade to offer for shifting the responsibility off their own shoulders, and referring Mr. THOMAS to those who, perhaps, have decided on the view of a debtor and creditor account between the capital represented by their present trains of carriages, and the cost of supplying those which may secure the lives and limbs of her MAJESTY'S liege subjects? It reflects but little credit on the prudence and foresight of modern legislation, that while it conferred on public companies powers extraordinary, and to some extent supreme, it reserved to the State scarcely any authority or jurisdiction over them.

The moment is propitious for presenting the views of Mr. THOMAS to the public consideration; the subject of railway accidents has already occupied the attention of the House of Peers during the short period which has elapsed of the present session; and we have just had the impressive declaration of the Lord Chief Justice of England, in his place in Parliament, that the existing laws are defective, and that legislation is essentially requisite. Before such legislation can be effected, Mr. THOMAS's plan can be fully and fairly tested: if found valueless, it will, of course, be rejected; if inefficient to the full extent proposed, it may still lead to other improvements, or perchance originate some perfect system. We have done our duty in awakening the public to its importance, and demanding for him full and fair enquiry; and we strenuously protest against the responsibility of Government, in a matter of such moment, being transferred from one department of the administration to another. As legislation on the general subject of railway management is clearly contemplated, the British public, with the appalling calamities which have repeatedly occurred fresh in their recollection, have a right to require and expect, that it will vest in some approved public functionaries the means of averting, so far as human foresight can avail, their repetition.

The nucleus of a MINING SCHOOL has lately been established. For a long period we clamoured for Government inspectors to our mines; this crying evil was remedied by their appointment: we did not think the powers they were invested with were stringent enough; but as it was a commencement, and a *prestige* of better events, we were content to remain silent, to see how the system worked. Without any blame being laid to the inspectors, it has been sufficiently proved that, since their appointment, there has been no diminution in the sacrifice of human life: annually hecatombs are slaughtered to the Moloch of Fire Damp; and two individuals, LEWIS PUGH and GRIFFITH EVANS the younger, were immolated at the Glandyrris Colliery, the property of the Cyfarthfa Company, owing to the neglect of the fireman, who on this occasion was the father of one of the victims. Printed rules were laid down for his guidance; he had, according to the statement of the agent, Mr. BEDLINGTON KIRKHOUSE, the power of carrying out all these regulations; this he culpably neglected to do, and the consequence is that a verdict of manslaughter has been brought in against him. We do not here recapitulate the facts adduced at the inquest, which thrust two erring mortals into eternity: the cause of this calamity, in addition to the poignant idea that he has sacrificed his own son, may have to suffer imprisonment. This will not remedy the evil. Appoint inspectors, make what fiscal regulations you please; but if you are to succeed in preventing these dire calamities, give the working miner—EDUCATION.

The interest exhibited in the question of Gold in England, or rather of the practicability of rendering it commercially available, increases every day, and there is no doubt, considering the great importance of the subject, that that interest will not suffer any diminution. For many weeks past we have been inundated with a flood of enquiries respecting Mr. BERDAN's machine, which we hear is about to become British property, by passing out of the hands of the inventor into those of a company composed of gentlemen of the highest respectability in the City of London. For these reasons, and with a further view to the accommodation of our readers, we have determined to collect the reports of the very numerous experiments made with the machine in London, and other important information scattered through our columns, and print it in a SUPPLEMENT to the Journal of this day.

In our Journal of the 19th of November, we called attention to a subject not only of great importance to the mining interests of Great Britain, but also to the safety and security of the public in general—we allude to the use of iron as a material in the formation of the roofs and floors of houses; and we pointed out the great extent to which it had been adopted in the vast and splendid buildings now in progress of erection in Paris. We find that the subject occupied the attention of an extraordinary general meeting of the Royal Institute of British Architects on the 23d Jan. last, in a discussion which resulted from reading a paper on what is generally known as "FOX and BARRETT's patent." The principal object proposed by that patent is to form the floors of buildings of materials as imperishable as the walls themselves, by the substitution of joists and girders either of cast or wrought-iron for those of timber, and the employment of layers of incombustible materials, supported by and consolidated with the iron joists. It was denied at the meeting that the building trade in this country was in any respect indebted to the French for the plan. The design was, perhaps, originally English; but undoubtedly it has been more generally adopted in the large massive houses now being built in the capital and other large cities of France. Several buildings in this country were, however, referred to as examples of the same style—amongst others her MAJESTY'S new royal residence at Balmoral, in the Highlands.

Independently of personal considerations, and even of considerations of trade, the subject is one of general, and even national interest, when we reflect not only on the constant sacrifice of human life, but on the enormous sums of money annually lost by fires in this country. Even in the present week a distressing case has occurred—no less than seven human beings having been burnt to death in one small house in Princes-street, Leicester-square. The general extension of the proposed system, while it would check the sacrifice of life, would necessarily tend to promote an enlarged demand for iron, and thus lead to increased activity in the most important branches of our mining interests—the coal and iron trades. By the employment of iron, with proper concretes, cheap and durable floors can be formed, which would in truth be fire-proof. The formation of concretes, and the action of fire upon them, led to considerable discussion at the meeting to which we have alluded; and there seemed to be a very general opinion entertained by those present, that an extensive use of iron was essential to afford due protection to modern houses, erected on the most approved principles.

It appeared to be admitted that there was no very great difficulty in extending the application of iron by the adaptation of boiler-plate girders to the new method of construction, combined with joists of cast or rolled-iron, so that care be taken to provide for every possible contingency, both as regards the width and weight of bearing, the strength and solidity of the floors, and their liability to vibration. The interest attached to the enquiry is not confined to architects alone; and as that very intelligent and influential body appears to approach the investigation of the subject with every fair disposition to master it, and to give the public the full benefit of the information they have acquired, we are entitled to anticipate from the mining community the fullest co-operation.

The rage of the present day, as far as regards mining, is for gold; and our columns are teeming, not only with the discoveries of the precious metal in California and the Antipodes, but the universal cry is—"Gold in England!" and should the results of the several machines be practically carried out, there can be but one opinion, which is, that these islands possess, in no inconsiderable degree, auriferous deposits which possibly will form a considerable item in our metallic industry. Companies have been formed for the purpose of extracting gold, and mines hitherto considered comparatively worthless, have, on the faith of the precious metal discovered in the samples, been invested with an undue importance, and obtained a fictitious and exaggerated value in the market: the more useful metallic substances are disregarded, and we are led to believe that if gold can be obtained at the rate of 2 ozs. per ton, it will leave a large profit, and that it is no matter if all the adjuncts are wasted. Though in some instances we believe that parties may be successful, yet we think all these glittering statements should be received with caution; for in this, as in all other cases, the majority, we opine, will be grievously disappointed. With these facts before us, we were somewhat surprised at seeing a prospectus for the formation of a company for the purpose of exploring and working the mineral deposits which are known to exist in large quantities in the Grand Duchy of Tuscany; the avowed purpose of the association being to work the Terriccio, and Miemo, or Faggetta properties, which according to assay have yielded as high as 67¾ per cent. of copper, the lowest sample being 26 per cent. It is not our intention here to enter into the merits of the prospectus, or the value of the property which is put forward by the promoters; the statement appears to us to have been carefully prepared, the statistics accurately brought forward, and no promise held out that the quantity of gold discovered will pay for the working, independent of the immense profit that must be derived from the copper. The mines are situated not far distant from the port of Vada; labour is moderate, provisions cheap; and from the returns already made by the present inefficient manner of working, there can be but little question that when developed, economically and scientifically, commensurate returns will accrue to the proprietary. The directors are men who have been largely concerned in mining, and are, from position and experience, fully competent to the duties they have undertaken; and in the statement laid before the public, they have wisely refrained from using that delusive bombast which in too many instances has thrown such discredit on mining adventure generally. The company has been fortunate in securing the services of Mr. John Petherick, whose caution and abilities are so well known. It may be remembered the deplorable position the Mining Company of Ireland was in when he took the management of the property; and its prosperous position cannot be forgotten when he resigned. Taking all these simple facts into consideration, we are led to believe that among the many speculations daily arising, the Copper Mining Company of Tuscany is a legitimate enterprise.

We give in another column a letter on INTER-OCEANIC COMMUNICATION, from a correspondent, of whose opportunities for forming a correct opinion, by personal acquaintance with that part of the isthmus we are well apprised. It is unnecessary to say that the views of the writer tend directly towards a canal at Panama, but we presume that his opinions would be modified by statements, showing a more practicable route, which has not yet received the attention that the mass of evidence relating to it ought to have ensured. We by no means assert that our correspondent errs in saying that a canal of some kind is possible at Panama; still we must not omit that the sections now familiar to every engineer from Col. HUGHES's survey, and the Congressional report, with its appendix, to which our correspondent refers, have satisfied us that, to make anything like a serviceable ship canal, the expenditure would be too large for a commercial undertaking, although less probably than would be required for the line we have been discussing. Our object in calling attention to the subject is not to decry or laud any particular project which may have merits to be considered; we wish, however, to get rid of hallucinations and visionary schemes, and then the business to be done is not to father this or that favourite, or make use of this international necessity as a leverage to work a different object, such as to pay the National Debt of England or that of New Granada. A pet project with some people is the latter, as we find, and just as reasonable and honest would be the former. We shall have a few words on this subject in due course, and, in the meantime, it is sufficient to say that the notion is no novelty; while the opinions of the commercial classes here, and in America, and of the guardians of public speculation,—our confraternity of the Stock Exchange,—are already formed, and unmistakeably decided against anything of the kind.

The ground which we propose to occupy through the consideration of the various projects is this:—When we have the whole of the case before us, by the "comparative" surveys of all the lines of which we have as yet no sufficient data, and not till then, will it be justifiable to allow any particular plan to be carried into effect, by the application of the very large amount of capital required for the lowest estimate that can be suggested, in regard to the construction of a ship canal, navigable for all classes. Nothing less than such a canal will suit the convenience of commerce; and if our Government propose to intervene, or patronise a private enterprise, we are entitled to demand that no sacrifice shall be made of that principle—that no precipitation shall be permitted, and that no wasteful expenditure, or any premature proposal, shall operate to the prejudice of the *most* practical plan.

A work of the highest value to the mining community, the sixth edition of Mr. WORDSWORTH's Treatise* on the various branches of the law, which include mining and other joint-stock associations, not requiring the express authority of Parliament, has just been published, and we take the earliest opportunity of directing attention to it. Mr. WORDSWORTH is well known to the profession as the principal and most popular text-writer on public companies; and his other publications, on the law of railways, canals, and all companies requiring express authority of Parliament, and also on patents for inventions, are considered the leading guides on these important subjects. The series is completed by the publication now before us, the value of which may be fairly estimated from the number of previous editions.

Mr. WORDSWORTH, in his preface, assures us "that although in form this appears to be a new edition only, yet more than one-half of it has been re-written, and the remainder re-arranged, altered, or greatly added to; that the authorities upon which the work is based come down as late as the *Law Journal* for Nov., 1853, and that they have been anxiously and laboriously considered." Clear and concise in its arrangement, it presents a compendium not only of the common and statute law bearing upon the several important heads which it embraces, but the decisions and adjudications of the several courts, both of law and equity, relating to them are succinctly classified, and are of easy reference. In addition to upwards of 400 closely-printed pages in the text of the Treatise, the work contains some very complete appendixes. In one we find collected all the statutes bearing upon the several subjects to which the work is devoted; in another, approved forms of all deeds or documents relating to the formation and management of Cost-book and other joint-stock companies, not requiring special Acts of Parliament for their constitution; and in a third, are contained forms at the present moment of the very highest value—viz., all those that are required for establishing a foreign company as a *société anonyme*. This latter collection relates to France, and other foreign states, and will necessarily furnish a most useful guide to parties willing to associate in the formation of companies for working mines in other countries. The mass of information combined on a great variety of important matters in this very useful compendium, at a very moderate price, renders it an almost indispensable hand-book in every office, commercial as well as legal, connected in any way with mining enterprise. As the book presents in every page distinct evidence of an extensive range of legal reading, and exhibits great care in its compilation; we do not hesitate to recommend it to such of our readers as desire to be fully informed on every branch and bearing of the very important subject on which it treats, and which it may almost be said, so far as present sources of knowledge extend, to have exhausted.

In another column is inserted a letter on the "Gold Discoveries in England," from Mr. MURCHISON, and the views expressed in which are so clearly and forcibly explained, that we would direct the attention of those interested in the subject to that gentleman's valuable communication. Mr. MURCHISON evidently founds his opinions chiefly on the results of experience, which are the safest guides, we may say, in all cases; and he deserves much credit for the bold and candid manner in which he has come forward on a question which is exciting so much discussion at the present time.

VALUABLE DISCOVERY OF COAL AT SEAHAM.—A most important discovery has just taken place at the Seaham Colliery. From practical information, we learn that, on the 22d January, a seam of coal was cut at a great depth, intersecting a band of excellent fire-clay. It has been supposed that in this district the coal, although of good quality, did not hold deep—in fact, the district has not been sufficiently tried; and if our correspondent's averment be correct, this pit will far exceed both the Monkwearmouth and Thornley Collieries. The estate is supposed to contain 3000 acres; the seam is calculated to return 14,520,000 tons of coking coal. The colliery is the property of the Marquis of Londonderry; and, under the able management of Mr. George Elliott, there can be no question of its being adequately and properly developed, and a great return made to the noble landlord. In order, however, that the full advantages of this discovery may be made available, greater dock accommodation should be afforded; and from the abundant supply of coal to be anticipated, and facilities afforded for the erection of glass and iron-works, in a brief period would render Seaham one of the most important towns in the north of England.

INDURATED STONE.—A recently patented invention, for the hardening and preserving of stone, opens up such a field for the improvement of all native quarries, that some allusion is due to the process of the patentee, and to some very admirable specimens which were exhibited—pieces of chalk stone (called clunch) squared, of such hardness as to serve for hones; various specimens of Bath and caen stone, also preserving their natural colour, were not only much increased in specific gravity, but solidified and compact as porphyry, being perfectly non-absorbent; fine traceries and patterns having been cut, in their soft state, the process of induration is stated to be effected in a few minutes, and at a comparatively trifling cost. Without this the invention would be useless, but that being attained, a new era dawns upon architecture, which has hitherto been subjected to the disadvantages of premature decay, whatsoever material might have been used in the construction; the finest carvings and most ornate portions suffering most. By the application of a fluid, chemically prepared, and laid on with a brush, the surfaces and elevations of old buildings, or stone, brick, or compo, may, it is alleged, be preserved, requiring only an ordinarily dry day for the operation. The finest statues, statuettes, medallions, or large objects of art in stone, may also be indurated so as to be susceptible of a high polish, where such is desirable. No fire heat being used on the material, there is no shrinking nor contraction. The patent proprietory propose to act as a company for vulcanising and preserving stone, having several various solutions and processes—the principal one using sulphur as the basis. The wasted and exfoliated state of our best buildings discover the sad ravages which this climate, with the gases, smoke, and alternations of temperature make on the best native or foreign stones. If the vulcanised stone resist these, it must prosper.

* "The Law of Mining, Banking, Insurance, and General Joint-Stock Companies, not requiring express authority of Parliament, &c., with all the statutes and numerous forms of deeds, &c." By Charles Wordsworth, Esq. Sixth Edition. Benning and Co., Law Publishers.

AN INTRODUCTORY LECTURE ON GEOLOGY,

DELIVERED AT UNIVERSITY COLLEGE, LONDON, BY PROFESSOR MORRIS, F.G.S.

[*Continued from last week's Mining Journal.*]

Again, in speaking of the composition of the globe, we must clearly understand the fact, that it is only a small portion of the earth's crust, a few miles in depth, that the geologist has to deal with; and that apparently limited as is that extent, yet the changes it has undergone in its composition have been so modified as to allow us to gain a knowledge of the structure and the arrangement of the mineral masses, so beneficently ordered as to render the different substances both available and economical. In consulting a diagram, or ordinary globe, on which the proportionate elevation of the highest mountain is laid down, as compared with the diameter of the earth, it will be readily perceived that, important as they may appear to an ordinary observer, when compared with that diameter, they constitute but minute protuberances, and consequently interfere but slightly with the general form of the globe.

A cursory survey of any district might lead us to imagine that the earthy and stony materials are distributed without any particular arrangement. This is not the case. However numerous these materials are, and however varied in their composition, yet, in the classification of the geologist, they are shown to bear a natural systematic relation, and this not merely in a limited district, but, when we carry our observations over larger regions, we still find a definite arrangement, and that a uniform order of succession. In looking at a geological map, the many patches and lines of colour, that represent definite areas occupied by, and composed of, so many distinct substances, seem, perhaps, to be somewhat arbitrarily disposed; a little study will make this plain. In passing along the cuttings of a railway, rock after rock, soil after soil, succeed in endless variety; but this variety is not one of confusion. Again, in boring a well, and sinking the shaft of a mine, layer after layer of hard and soft rocks, here sand and clay, there flinty rock and limestone, succeed each other in many alternations. In all these instances, the eye of the geologist detects a well-marked order: whilst the successive strata are mutually related as to age, the uppermost beds of the respective sections being necessarily the youngest,—the larger series of rock-formations, comprehending these many smaller suites of beds, and laid down as coloured patches on the geological map, are disposed in a well-marked successional order, which is never inverted, and which constitutes one of the most important and fundamental facts of geology.

This grouping of the strata in a certain order of succession was recognised by Lehman (1756), alluded to by Mitchell (1760), advanced by the researches of Fuchsel (1779), and generalised by Werner. The fact, however, was first clearly enunciated by W. Smith, who, during the laborious investigations connected with his profession as an engineer, remarked that the remains of organic bodies, which are found in the mineral strata, occupied definite relative positions, and that certain groups of organic forms were generally characteristic of a similar mineral stratum over large portions of England, and by means of which its horizon could be identified.

This great advance, in conjunction with the doctrine of geological succession, so clearly brought forward by Smith, is a period in the history of geology, and belongs to the English school more especially as connected with the secondary deposits; for the German, as represented by Werner, was chiefly occupied with the study of the primitive rocks, and their mineral and chemical characters, the organic forms receiving but little attention. Frascatoro, it is true, had inferred that all the remains of animal bodies could not have been entombed at the same period; and Stenon (1669) recognised the successive formations, the more regular distribution of organic remains, and even the dislocations and fractures to which the strata had been subjected; Saussure had also remarked the relative age and epochs of the appearance of different species.

The brilliant discoveries of Cuvier and Brongniart succeeded those of Smith, and form another epoch in geological science; for with the French school may be said to have arisen the study of tertiary geology; and marvellous indeed were the wonders disclosed by these illustrious naturalists, in pointing out the conditions both of land, sea, and fresh water, which had formed the soil around and beneath Paris,—nay, more, from the bony fragments obtained from these deposits, the genius of Cuvier restored the form, and elucidated the characters, of the very mammalia which had lived and grazed around the margins of the older lakes and estuaries of this region.

Referring again to any section, either obtained by sinking a shaft, or traversing some well-exposed continuous line of cliff, we ascertain—1. That different substances succeed each other.—2. That they contain distinct animal remains.—3. That these remains differ from each other in each deposit.—4. They are also different from those on the surface.—5. They resemble in many instances tropical forms.—6. They are distinct as species; and, further, the contrast becomes more decided when we compare the forms of the three great geological divisions—primary, secondary, and tertiary. Geology reveals to us that certain forms are no longer existing, and that the fact ascertained by the early naturalists of the stony rocks having undergone one change of life, is a point gained in the history of the globe, and the principle involved is as instructive and suggestive, if not as important, as the data calculated by Bronn, that the changes of species in the globe have occurred about 30 times.

If, gentlemen, in pointing to this diagram, showing the general succession of rock formations as divided by modern geologists, I draw a line between the so-called tertiary and secondary, we acquire a fact, that at this point (I speak generally) there is a marked division between the life of the two periods: above this line we find traces of forms now living which increase in number as we ascend; below it, with a solitary exception or so, all the forms no longer exist. The proof, therefore, of the dying out, or extinction of certain forms, infers that life is a limited gift, and necessitates the existence of certain laws. Further, when we ascertain there have been many such extinctions of species, it involves the successive continuance of certain laws, by which the physical conditions of each period have been so far modified as to be inimical to the existing life; so that with each successive change new phases of organic beings have been called into existence, adapted to the changeful scenes of the earth's physical history; revealing to us in characters too plain to be misunderstood,—characters indelibly impressed on the solid rocks of the globe,—that mutation, and not permanence, plays the most important part in the order of Nature. Thus there is a connection between the organic and inorganic kingdoms, a dependence as it were of vitality upon invitality. He who only looks at the successive adaptation of life to the varying physical conditions, without regarding the interesting fact that the continually varying forms of the successive beings performed similar functions in the different life periods (however imperfectly understood by us), sees but a part of that manifestation of creative design revealed by geological science. Dolomieu long ago said that every stone played an important part in the history of the globe; so shall we find, when each fossil is fully studied, that it forms but a link in that grand scheme of creation in which the form observed in the stony record of the past is closely connected with the organism of the present.

From this general view of the intimate connection between organic and inorganic nature, I shall proceed to the examination of a few facts connected with this portion of the subject, simple, but important clearly to understand. They are of three kinds—1. The nature of the strata.—2. The contained fossils.—3. Their mutual relation. The first table (illustrated by diagrams) indicates merely the general succession; on the second I have attempted, although imperfectly, to show the relation of the strata at different epochs. In consulting it in reference to the nature of the strata in the inorganic part, it will be perceived there is constant recurrence of the same series of rocks, as beds of sand, clay, and limestone; in the organic part we find there is constant replacement of new forms. A further examination of the same table also exhibits that physical conditions have obtained at many past periods nearly similar to those which characterise the present surface—land, freshwater, and marine: thus, on the left hand, are attempted to be represented the marine conditions, those on the right referring to the terrestrial. It is the attempt to parallel these two groups that constitutes one of the most interesting points of geological enquiry, and bears upon other considerations of some interest. Thus it has been inferred from the character and extensive distribution of similar types of animal and vegetable life found in the earlier strata, that the land was insular, and that there was a more general uniformity of climate than that which now prevails. With the secondary rocks, there was a gradual increase of land of a maritime character; with the tertiary, this assumed a continental form, and became divided up, giving rise to special and local Fauna and Flora, distinct from each other. It is not only in species, but in groups, that the animal of different regions are distinct from each other at the present day; a fact in contrast with the more general diffusion of the same type of corals, shells, or crustacea at the primeval eras, indicating that the physical conditions which influenced the climatal character and organic distribution differed the more we recede from the present period. That the original masses of sand, gravel, and clay have not remained under the conditions, or in the place where they were accumulated, is a second proposition of considerable practical importance. These ancient sea or lake bottoms have not only been elevated from their former position, but do not retain their original straight or horizontal position, and have also become consolidated: thus we find masses of rock, containing sea shells, forming many a mountain top, or disposed in such an inclined and sloping direction under which they could not have been deposited.

That, therefore, the stratified rocks have undergone disturbances, by some cause or another, is very evident,—a cause mainly attributed to the ejection and forcing up of masses of igneous matter from the interior of the earth (as partly represented by the volcano), rending asunder, contorting, elevating, consolidating, and placing at various angles the original horizontally disposed strata, without altering their relative arrangement to each other. The effects produced by these disturbances are of great economical importance; for had the various strata retained their horizontal position—had the accumulations in past time been piled one above other—had the coats of the earth's crust been formed of so many concentric layers, investing one another without any subsequent alteration in their position—the newest, uppermost, or last formed would only have appeared at the surface, and deep, indeed, would have been the excavations necessary, if not impracticable, before any of the useful materials could have been reached. Whereas the changes which have since been effected, by which the strata have been in places thrown into different inclined positions, so as to bring the edges of many of them to the surface, or cropping out as it is termed, have afforded access to various kinds of rocks, and rendered the more useful accessible at moderate depths, and which might otherwise have been concealed from man. These arrangements, however, are not merely useful in the supply of certain materials, but affect the nature and variations of soils, assist in the drainage of a district, and are materially connected with water supply.

From this peculiar position of the strata, as well as from its containing a complete series of the rock formations, England affords not only great facilities, but inducements to this study; for the geology of this country may be considered as an index to all the members of the series we meet with elsewhere. Nay more, limited as is our land, it is upon the very arrangement above alluded to that our commercial prosperity as a nation is based, and in consequence of which the Anglo-Saxon energy has carried England's natural wealth over the whole civilised world.

[*To be concluded in our next Journal.*]

THE COAL TRADE.

The following is a statement of the delivery of coals, &c., in the port of London during the month of January:—

	Ships.	Tons.		Ships.	Tons.
Newcastle	256	83,900	Scotch	5	1,155
Sunderland	107	34,771	Welsh	23	6,380
Seaham	39	10,506	Yorkshire, &c.	42	2,677
Hartlepool & West Hart.	141	40,905	Small coal and cinders	1	254
Stock., Middlesbro', &c.	42	11,269			
Blyth	5	1,289	Total	641	193,146

Coals brought by railway, and entered at the Coal Market during the month of Jan., 1854 ..... Tons 69,191½

Coals brought by canal, and entered at the Coal Market during the month of Jan., 1854 ..... 1,811¼

Coals brought within the London district on common roads, and entered at the Coal Market during the month of Jan., 1854 96

THE RAILWAY COAL TRADE.

Monthly statement of coal and coke brought by railway and canal within the London district, during the month ending January:—

Railways.	Tons cwt.	Railways.	Tons cwt.
Great Northern	34,905 14	Great Western	8,021 0
North-Western	15,855 10	South-Eastern	1,954 7
Eastern Counties	8,455 1		

Total by railway in Jan., 1854 ..... 69,191 13

Coals by railway in Jan., 1853 ..... 48,134 5

Coals by canal in Jan., 1853 ..... 2,063 15

THE GOLD DISCOVERIES OF GREAT BRITAIN.

The experiments on various descriptions of gossans, quartz, and mundic are still being carried on, to ascertain their value. The present returns by Berdan's machine are the result of only four days' experiments, as arrangements are making for trials on a large scale; and amongst them Mr. Berdan has undertaken to operate on several tons of quartz from Penmaen early in the ensuing week. The samples heretofore tested from this mine have produced at the rate of 2 ozs. to the ton. From the Trenault Mining Company the quartz has produced at the rate of 6 ozs. 3 dwts. 8 grs. of gold to the ton; and from the South Devon Great Consols, 68 lbs. gossan from the adit level produced 2 dwts. 14 grs. of fine gold, equal to 4 ozs. 5 dwts. 5 grs. per ton. The following are the experiments of the week:—

Feb.		Gold. dwt. gr.		Per ton. oz. dwt. gr.
3—Mr. Arthur Dean	219 lbs. quartz	3 20	=	1 19 4
Ditto	175 lbs. ditto	0 16	=	0 8 17
Mr. Battye	112 lbs. ditto	0 14	=	0 11 16
Ditto	140 lbs. ditto	0 19	=	0 12 16
Wheal Franco	224 lbs. refuse	3 9	=	1 13 18
Pwll Roman Mine	224 lbs. spar	1 1-10	=	0 10 1
Mr. Fuller	142 lbs. —	not communicated.		
Ditto	64 lbs. ld. or flook.	11 0		gold, sil., cop.
Ditto	87 lbs. —	8 11		ditto
Mr. Ridge, Cornwall	144 lbs. wh. iron gos.			
4—Mr. Fuller	102 lbs. quartz	a trace.		
Wheal Alfred	94 lbs. gossan	1 0	=	1 3 19
Mr. Fuller	188 lbs. ditto	not communicated.		
Mr. Readwin	148 lbs. pyrites	—		0 10 0
Ditto	240 lbs. sulphur	—		0 15 12
Ditto	176 lbs. ditto	—		0 12 4
6—Mr. Hacket, Germany	200 lbs. gossan	1 6	=	0 14 0
Mr. Lloyd	336 lbs. quartz	not communicated.		
Ivy Tor Consols	71 lbs. gossan	1 2	=	1 14 4
Mr. Tolkington	123 lbs. ditto	nil.		
7—Llawrewmbach	336 lbs. lead ore	1 15	=	1 20 0
Pencraigdu	336 lbs. ditto	0 4	=	0 1 3
Trenault	28 lbs. quartz	1 13	=	6 3 8
South Devon Great Consols	68 lbs. gossan	2 14	=	4 5 5
Ditto	70 lbs. ditto	0 20	=	1 6 16
Ditto	120 lbs. ditto	3 12	=	3 5 8

We expect that, in our next Journal, we shall have details of considerable importance to communicate.

THE GOLD DISTRICTS OF WALES.—At the Geological Society, Prof. A. C. Ramsay, F.G.S., read a paper on the Geology of the Gold-bearing district of Merionethshire. The part of Merionethshire referred to in this paper lies between Dolgelly and the Moelwyn and Munod range, north of Festiniog. Gold was discovered in 1836 in this region, in a copper-bearing lode near Tyn-y-groes, in very minute quantities. In 1843, it was found in Cwm Eisen in some quantity; but heretofore that mine, though often wrought, has never yielded a steady and profitable supply. Last spring a shaft was sunk at Dol-y-frwynog on a lode in search of lead. The lode was soon found to contain gold visibly diffused through the quartz in threads and grains in an unusual quantity. This lode runs north-north-west, through a country composed of talcose schist, through which a mass of greenstone has been intruded. The quartz is saccharoid, and contains much iron-pyrites, chlorite, and soft decomposing talcose matter. Below and above it are the ordinary Lingula flags of the Lower Silurian rocks. Numerous greenstone dykes penetrate these beds and the underlying Cambrian grits in all directions. Gold has since this discovery been detected in many other quartz lodes (with a little lead and copper) between Dolgelly and Moelwyn. They all lie in the Lingula series. The paper concluded with some remarks on the probable occurrence of auriferous drift in the valley of the Maroddach (traversing the district referred to), especially below the confluence of this river with the Afon Wen.

THE COPPER TRADE.—In the House of Commons, last night, on the motion of Mr. Michael Williams, there was ordered an account of the quantity of copper exported from the Port of London in the year ending the 5th day of January, 1854, distinguishing each sort, and to what country exported. Similar return for the Port of Liverpool. Accounts of all copper ore which has been imported into the United Kingdom for the year ending the 5th day of January, 1854, showing the quantity upon which duty has been paid, the countries from which the same has been imported, and the per centage quantity of metallic copper contained in each parcel of ore upon which duty has been paid, together with the rate and amount of duty received thereon. Of all copper imported into the United Kingdom in the year ending the 5th day of January, 1854, distinguishing each sort of copper, from what country, and into what ports imported. Similar return of quantity exported. Account of tin imported into the United Kingdom in the year ending the 5th day of January, 1854, distinguishing from what countries imported. Similar return of exports of tin. And an account of all zinc and zinc ore imported and exported during the year ending the 5th day of January, 1854, and the duty paid thereon (in continuation of Parliamentary Paper, No. 903, of Session 1853).

RUSSIA AND OUR METAL TRADE.—The revenue tables for 1851 show that Russia took of us hardwares and cutlery of the value of 86,044*l.*; lead and shot, 52,640*l.*; iron and steel, 70,214*l.*; machinery and mill work, 216,052*l.*; tin unwrought, 14,130*l.*; tin wares, 8167*l.*

THE MINERAL WEALTH OF INDIA.

The observations which have lately appeared in this Journal upon the expediency and policy of investigating and developing the vast, and as yet unexplored mineral treasures of British India have naturally attracted public attention. Our correspondent, Mr. JOHN IMPEY HOSKING, in his letter, recently published, very properly enquires—What has been done for the last 30 years in respect of some of the provinces of Upper India—viz., the extensive districts of Remoun and Ghurwal, known to contain abundance of iron, copper, and other metallic ores? He has answered himself, by showing the efforts of the Government officials, so far as mining operations are involved, to be insignificant, and even ridiculous. We clearly proved, from an official statement made in Parliament in the last session by the President of the Board of Control, that the increase of British exports to our Indian possessions had in the interval between the years 1835 and 1851 risen over 140 per cent. We are now enabled from an official document, printed by order of the House of Lords—viz., the Third Report from the Select Committee of that House, with the Minutes of Evidence—to show the equally great increase of exports from India to England. In the year 1834-5 the exports of merchandise amounted to 7,993,420*l.*, of treasure to 194,740*l.*, making a total of 8,188,160*l.* The exports in 1849-50 had increased, of merchandise to 17,312,299*l.*, of treasure to 971,244*l.*, making a total of 18,283,543*l.* We have no means of testing how much of this very large sum consisted of mineral products, but we much fear but a small proportion, attributable, we cannot avoid thinking, in a very great measure, to the neglect of mining interests and operations in the several presidencies. We cannot avoid expressing our regret that, in the very extended parliamentary enquiries which have recently taken place in respect of the interior of India, but little attention seems to have been devoted to the geological structure or mineral resources of the country.

We quite concur with the views of witnesses examined before the Lords' Committee, that the best mode of ascertaining what the country possesses is to improve and increase the means of communication with the interior. We have the authority of Lieut.-Col. JOHN PITT KENNEDY, who had been military secretary to the late Sir CHARLES NAPIER, and afterwards officially connected with the Department of Public Works as consulting engineer to the Government of India in the railway department, "that India has not a tenth or a hundredth part of the advantages in the way of communication that France or Germany possesses; whilst England, with tenfold prosperity and civilisation, has likewise tenfold facilities for the production of wealth, amongst which communication is the greatest." This intelligent officer freely admits "that the Government are directly responsible for this most important of all branches of administration, as roads are the first indispensable preliminary to national improvement and progress in other matters." In reference to the construction of the great railways in contemplation he emphatically declared—"I cannot help hoping, too, on this subject, that efforts may be made to work the native iron, as the large demand upon England, growing out of active railway operations in India, would assuredly increase enormously the price of that article in this country" (p. 36). We must also remember that this announcement was made from the highest official authority connected with the department of railways in India, before the requirements of the railways of France forced on the French Government the measure of lowering the duty on English iron.

The following important question was put by the Committee to Colonel KENNEDY, and we subjoin his answer (777):—"Are you aware of the state of affairs in India with respect to the possibility of procuring iron?—I had an opportunity of seeing the report of the geologist, who was sent out there about two years ago. He has been examining the districts to the north of Calcutta. I think there is a great deal that is satisfactory in his report, but I do not like the conclusion of it, because I think he seems to throw over the extraordinary advantages of cheap labour in India. We find that he brings out a comparison between manufactured iron in India and manufactured iron in England, showing very little difference. He gives a comparison as to wrought-iron, showing a saving in favour of India of about one-eleventh of the whole cost. I think he has not given full consideration to the difference of the value of labour in the two countries as forming an element in the price. I have no doubt from what he says that a sound speculation in iron will afford important facilities to the construction of railways in India" (p. 39). We have thus at second hand an important admission that a mineralogical survey and report has been made of at least one district, and we are entitled to enquire, why is it withheld from the British public? We maintain that the mining community of this country, who would be far better able to examine its details and its reasoning than any military officer can possibly be, are entitled to call for its production. They will be the best judges of its value, if it possesses any, and best able to detect misconceptions and miscalculations, if the report be based on both. At all events, let the survey be what it may, the mining interests of England must have it, in order to be enabled to form their own judgment upon it, and to decide whether it discloses facts and furnishes prospects sufficient to justify the attention of enterprise, or the investment of capital in that quarter. While we make these observations, we cannot avoid protesting against the penurious but preposterous absurdity of employing one geologist to survey and report upon the mineral resources of an empire containing nearly one million and a half of square miles—more than, we believe, the area of all Europe.

As we fully concur with Col. KENNEDY in his views as to the inestimable value of increased communication with the interior, we feel gratified that the Appendix to the Report enables us to lay before our readers some most interesting and important details, as to the progress of those public works which are most likely to conduce to the development of the mineral wealth of India. The railroad from Calcutta to the north-western provinces was projected in the year 1844, and the contract for its construction, between the East India Company and the railway company, was signed in the month of August, 1849: the expenditure of 1,000,000 sterling was sanctioned for the first section; a further sum of 1,000,000 has been since sanctioned for the purpose of continuing the extended line, the entire expense not having been yet estimated. The East India Company have guaranteed interest on the capital advanced for the purpose of this railway at the rate of 5 per cent. per annum on the first million, and 4½ per cent. on the second. The first line will extend from Hourah, opposite Calcutta, to Raneegung, *viâ* Pundooah and Burdwan; the continuation will be from Burdwan, in a northerly direction, to Raj Mahal, and thence probably along the right bank of the Ganges, to Patna Mirzapore, and Allahabad.

A sum of 500,000*l.* has been also sanctioned for a railway in the Presidency of Madras. The execution of the line has been undertaken by a company, under a contract with the East India Company. It will commence at Madras, and take a westerly direction, probably to Arcot; the determination of its ultimate route being postponed until the surveys which have been made of the Eastern Ghats, in order to ascertain the most desirable point to cross. The interest on this sum is also guaranteed by the company at 4½ per cent. per annum.

In the Bombay Presidency, an experimental line of railway from Bombay to or near Calian, with a view to its extension to the Malsej Ghat was authorised in the year 1849. The capital of this railway company, a sum of 1,000,000*l.* sterling, is entitled to bear interest at 5 per cent.

These are exclusive of great trunk carriage roads now in progress: and some idea may be formed of the cheapness at which both can be made when Col. KENNEDY tells us that he has to deal with wages at the rate of only 3d. per day. The above three lines of railway form, however, but a very inconsiderable portion of those in contemplation, and in respect of which reports have been furnished to the Government. Col. KENNEDY, in his evidence, referred to a report furnished by himself, in which he has given a schedule of 12 lines of railway, which he had suggested for examination, placing them *seriatim* in the order of their respective importance. No. 1 in that schedule is apparently the only one at present actively in progress, and was a line from Calcutta to Agra, which it was suggested in time should be extended by Delhi, Kurnoul, Loodiana, and Lahore, to the Indus at Attook. These 12 projected lines would, according to Col. KENNEDY, embrace 5177 miles, at the average rate of 5000*l.* per mile, which is estimated for their construction, requiring a capital of about 25,885,000. A second schedule in the same report, contained the foregoing and seven other additional projects, estimated at the same rate of mileage cost, which would raise the capital required to 39,160,000*l.* sterling (p. 31). The avowed objects of the Government in these extensive projects for railway communication, are to secure perfect occupation of the country, and to facilitate military operations; but it is evident that they must also tend vastly to the internal improvement of our extensive eastern territories, and to open fresh sources of national wealth. When the expenditure of so vast a capital is contemplated, even although it may be spread over a long series of

…t must necessarily demand an immense supply of iron for the com… of the works, which the extensive claims on England for foreign …s may render it extremely difficult, if not impossible, for this coun… furnish. It is difficult, therefore, to conceive a fairer field for specu… enterprise, and profitable investment, than the native iron mines of …ntry itself; and we trust that no spirit of monopoly or favouritism …part of the East India Company has as yet contrived, or may here… tempt, to exclude from such great prospective advantages fair and …petition in this country.

STATISTICS OF OUR RAILWAY SYSTEM.

Our Journal of Dec. 31 contained some very interesting details, extracted from a valuable paper, entitled *Analytical View of Railway Accidents*, by F. G. P. Neison, Esq., hon. secretary to the Statistical Society of London. It presents so much important information, collected and collated with such uncommon assiduity and care, that we cannot hesitate again to call the attention of our readers to it. The entire railway communication in these Islands open for traffic on the 31st of December, 1852, was 7336 miles; the five years immediately succeeding the 30th of June, 1845, were the period of the greatest activity in the construction of railways, nearly 4,250 miles having been opened to traffic within that time, being upwards of one-half of the whole extent of railway communication. The maximum extent of railways opened for traffic in any one year was in 1848; since which period much less activity has prevailed, and the number of miles opened has gradually declined every year down to 1852.

Mr. Neison properly remarks, that however satisfactory this activity and energy in developing the railway system may appear, it still contrasts unfavourably with their progress in the United States of America. From the Seventh Census, printed by order of the House of Representatives, it appears that on the 1st of January, 1852, the number of miles open for traffic in the States was 10,843, and the number of miles in progress 10,898, being a total of 21,741 miles. It further appears by that Census, that on the 1st of January, 1853, the number of miles open to traffic was 13,248, being an increase in that year of 2123; that the number of miles in progress was 12681, being an increase of 1783 miles: making a total increase in the year of 4206 miles. This active spirit of railway extension is not confined to one or two of the States, but appears to be, to a greater or less extent, characteristic of at least twenty-one of them.

There are, however, very many causes which, in addition to the vast extent of territory, account for this very striking increase in the American States, as compared with the progress of new railways in this country. Of these, the lower value and price of land, the great profusion of timber, its cheapness, and the greater quantity employed, are amongst the chief; and the large Parliamentary costs and expenses of procuring railway bills are unknown to, and would be scarcely credited by, our Transatlantic rivals. Their progress and advance may, however, be useful guides to us, and if their example were carefully followed in avoiding preliminary cost, and in more economical formation, we can venture to predict that many important districts would be opened to free and fertilising railway communication, which are now closed altogether against its increase. We can scarcely imagine any subject more worthy of the attention of that department of the Government devoted to railways—namely, the Board of Trade—and of the Legislature itself, than of relieving the industry, enterprise, and capital of the country of all unnecessary and oppressive incumbrances upon them, and making utility and practicability the sole preliminary tests of such important and improving undertakings. We would for this purpose most earnestly suggest a general railway committee, or board, irrespective altogether of the chambers of Parliament, and an addition to our consolidated railway code, authorising them to enquire into the propriety of all newly-projected railways, and to decide upon them, with an appeal in case of necessity to Parliament. We would not, of course, dispense with the powers of the Legislature; but a standing auxiliary tribunal of this description, under the control of the Board of Trade, would, in this age of reform, prove a valuable addition to our system of jurisprudence and home government.

There has been a nearly uniform rate of increase for the five years ending in June, 1852, in the first and second classes of passengers, of 54·3 per cent. in the first, and 65·6 per cent. in the second, while there has been actually a slight decrease in the number of passengers travelling by third-class carriages. It is a singular circumstance, that since the year 1846 the number of third-class passengers has been very uniform, notwithstanding that the lines of railway accommodation have since increased 156 per cent., the greatest number in any one year being 16,990,073 in 1851, and the least being 14,378,376 in 1849. Viewed in connection with this, will be seen the wonderful increase in the number of passengers travelling by parliamentary trains, ranging from 6,985,493 in 1847, to no less than 29,973,553 in the year 1852, being an augmentation of 329·1 per cent.—a striking instance of the many obligations in which the working classes of England were debtors to Sir Robert Peel; for to that prudent, far-seeing, and popular minister does the country owe the parliamentary or poor men's trains. In the receipts for the year ending the 30th of June, 1852, as contrasted with the year ending with the 30th of June, 1847, there was an increase in the receipts from first-class passengers of 42·7 per cent.; of second-class passengers of 47·0 per cent.; a decrease of third-class passengers of 10·2 per cent.; and an increase of the parliamentary-class of 235·00 per cent.

It appears that the railway returns, previous to the year 1850, do not furnish materials for estimating the different rates of fares in England, Scotland, and Ireland; but we are enabled to ascertain them for the three years 1850—52. The average rate during that period per mile in pence was in England and Wales, first-class 2·257, second-class 1·567, third-class 0·983, parliamentary-class 0·916; in Scotland, for the same, first-class 2·22, second-class 1·565, third-class 1·120, parliamentary-class 0·936; in Ireland, first-class 1·698, second-class 1·298, third-class 0·751, parliamentary-class 0·844. Mr. Neison states the following curious facts, illustrative of railway management:—While in Ireland the fares are for every class less than in either England or Scotland, the fares have been for the last three years uniformly decreasing, the rates in 1852 being about 5 per cent. less in the first-class, and 8 per cent. less in the parliamentary-class, than they were in 1850. In Scotland, on the other hand, there has been in the same period a decided increase of fares in every class; while in England the second and third-class fares only have increased. The scale of fares on the Scottish lines is very peculiar—the first-class fares are intermediate between those in England and Ireland; the second-class fares almost precisely the same as on the English lines, but 20 per cent. higher than on the Irish; the third-class fares are 14 per cent. above the English, and 49 per cent. above the Irish; and the parliamentary 2 per cent. above the English, and 11 per cent. above those of the Irish railways. The vast general importance of the parliamentary-class may be estimated from the following striking facts:—that in the year 1852, the last year to which the returns apply, the total mileage of the parliamentary-class exceeded that of the third-class by 324,416,156 miles, exceeded that of the first-class by 209,978,861 miles, exceeded that of the first and third-classes united by 54,616,984, and even exceeded the total mileage of the second-class by 13,570,910 miles; and it also appears that no less than 32·7 per cent. of the whole revenue from passenger traffic arises from parliamentary fares.

We alluded in a former Journal to the general decrease in the average distances travelled by each class; and although, since the year 1842, the total mileage has increased from 332,500,000 miles to no less than 1,370,792,153 miles per annum, still the average distances travelled by every passenger, taking all classes collectively, has decreased from 17·5 miles to 15·8 miles each journey, necessarily increasing the numbers of arrivals and departures from the various railway stations relatively to the whole amount of railway traffic. These observations are preliminary to enquiries into accidents and their causes, and the following is an abstract of all deaths and injuries, classifying the sufferers, from the 7th August, 1840, to the 31st December, 1852:—

	Killed.	Injured.	Ratio of injured to killed.
Passengers	266	1796	675·20 per cent.
Public, by their own negligence	175	65	37·14 "
Trespassers	306	84	27·45 "
Engine-drivers	73	94	128·77 "
Stokers	116	123	106·04 "
Guards	127	100	78·74 "
Porters	117	65	55·56 "
Other servants	648	321	49·54 "
Total	1828	2648	144·86 per cent.

There is here observable a marked difference in the way in which accidents affect railway passengers and railway servants. The number injured amongst passengers exceeds that of killed by 675·20 per cent., while amongst railway servants the numbers of those barely injured falls short of the number of deaths, the ratio of injuries being almost exactly 65 per cent. of the deaths. Mr. Neison very justly observes, that "although the public is naturally most alive to the manner in which passengers suffer from accidents, still every earnest enquirer must at once sympathise with the dreadful amount of accidents and fearful loss of life to which the servants of railway companies are exposed," and he promises to devote a future paper to this grave and important subject.

Our space will necessarily not permit us to follow Mr. Neison through his very minute and accurate tabular views. He classes accidents over which the directors and managers of railways have little or no control under the following heads:—Passengers mounting trains while in motion; passengers jumping from trains whilst in motion; passengers falling from trains while in motion; axles breaking; machinery breaking; passengers being run over. Accidents from all other causes Mr. Neison fairly attributes to the management of companies, or, in other words, as chargeable against the officials and servants of railways. Of 174 collisions which he records, the extraordinary number of 104 have arisen, as he conceives, out of what can be described as nothing but the most palpable negligence; 18 are due either to the neglect or mismanagement of signals; 47 have arisen from drivers neglecting signals, and other kinds of careless driving; 4 are due to the omission of the use of the break; 15 are owing to pointsmen neglecting their duty; 4 are owing to the neglect or carelessness of station-masters; and 16 have been occasioned by the inexcusable neglect of leaving waggons and portions of trains on the line, when the same line was in use by other trains. This last cause, however, nearly disappeared during the three years 1850—52, not more than one collision yearly having taken place from that cause. Mr. Neison has also collected no less than 134 cases of collisions, which it has been found impossible to classify in a satisfactory manner; but he declares them to be all attributable to neglect on the part of the servants of the companies. It appears, as the result, that about 44·7 per cent. of the deaths has taken place from causes, over nearly all of which the passengers themselves have control; but in regard to injuries, 9·5 per cent. only of the accidents are so circumstanced. With regard to casualties occurring from axles and machinery breaking, from which 8 deaths resulted, the passengers had clearly no control, and he observes that the companies can hardly be held responsible. It speaks favourably of the efficiency and excellence of British machinery, that in the thirteen years 1840 to 1852 inclusive, the number of persons killed by axles breaking was only 6, and by other machinery breaking only 2; the number of persons within the same period injured by the former being 15, and by the latter 31. The deaths from causes beyond the control of the companies form 69·6 per cent. of the number of injuries from the same causes, while deaths from causes under the control of the companies are only 9 per cent. of the number of like injuries; thus 9 deaths take place out of every 100 injuries which arise from defective management, while nearly 70 deaths occur from accidents within the influence of the passengers themselves. Mr. Neison very justly observes, that the facts he has recorded are of grave importance; and while he admits that the directors of railway companies have done an immense deal in recent years to protect passengers against loss of life and limb, they are still imperatively called on to take the subject of the frequent recurrence of collisions into their yet more serious consideration.

We cannot part with Mr. Neison without applauding in the highest terms the philosophical, as well as philanthropic, spirit which has dictated these interesting and highly important enquiries; we confidently expect from them very beneficial results, and while strongly recommending his present essay for general perusal, we look forward with anticipations of pleasure to the next publication of his intended series.

MINING IN NORWAY.

[FROM OUR CORRESPONDENT IN CHRISTIANIA.]

The Finance Minister has just published the official quinquennial report, compiled by the several bergmesters, to be laid before the Diet (Storthing), which meets on the 1st proximo, of the progress of mining industry in that country.

From this report it appears, that on the average the yearly profits from the Kongsberg Mines have been 32,860*l.* The total production of silver has been 126,692 marks 1 lod and 10 grains; the cost of raising this has been 74,877*l.*, which has realised 161,720*l.*, the number of persons employed being 369. Of copper from the different establishments—Alten, Poraas, Sebø, Quænangen, and several smaller works—there have been produced about 567 tons annually, making in the whole 2835 tons of cake and sheet copper; of this there have been exported 2598 tons, and at the same time there has been imported manufactured copper of the weight of about 16 tons. The number of persons employed at Alten were 326; the produce 690 tons. The principal profit derived from these works is mainly owing to the introduction of the tribute system, and the reduction in the smelting charges, which now do not average more than 22s. per ton, although 9s. is paid for coals. The ores are of the average per centage of 5½, and the cost of making a ton of fine copper is estimated at 16*l.* The lodes at Roraas, which mine has been established since 1644, have greatly fallen off: 1745 tons were produced there, at a cost of 88,096*l.*, 491 individuals being employed. At Sebø, with 125 men, the produce was 327 tons of copper, and the expenditure 16,850*l.* Several copper works have been only partially worked, and five abandoned, during the same period. In the previous five years, the total quantity of copper raised was 3212 tons, thus making a difference, compared to 2835 tons, of 377 tons. The fourteen iron works have produced, on an average, yearly 7228 tons pig-iron, 2864 tons castings, 4786 tons bar-iron, 272 tons blooms, and 320 tons iron plates. A quantity of cannon, gas-pipes, and rails, have arrived for the military and public works, and pig-iron has been exported principally from England, for the use of foundries established on different points of the coast.

The production of bar-iron has somewhat increased in the last five years, and a good market is found for it in North America; but both this and Swedish iron have formidable competitors in English iron for many purposes—this being offered at £37 per ton; while Norwegian iron a few years since realised from £95 to £105. In fact, the former is manufactured so cheap that, in spite of the heavy duties, it successfully competes with the native iron in Norway. The nail trade has somewhat fallen off—the total amount being estimated at about 190 tons, in 650 boxes, containing 40,000,000 of nails—many of them being of the smallest description. The production is not however, adequate to the consumption, as, in addition to rails, castings, &c., there have been imported from England 768 tons of bar-iron, and from Sweden 480 tons of the same material; and although the consumption of Norwegian iron has advanced slightly in Denmark, it has considerably retrograded in America. Owing to the introduction of the Nuremburg blue, the two cobalt works, Modum and Snarum, have experienced great difficulty of realising their produce. The latter has been abandoned. In 1848, the proprietors of Modum had in London a stock of the value of 7000*l.*, which they found difficult to dispose of, and even then at a heavy loss. These works, though on a smaller scale, have since been carried on by Messrs. Goodhall and Reeves. At Snarum, 115 men were employed, and at Modum 508. No cobalt is used in the kingdom. The product for the five years has been—Smalts, 616,195 lbs.; oxide of cobalt and refined cobalt, 20,636 lbs.; and zaffre, 288,713 lbs. Of this quantity 427,321 lbs. was exported to England; 55,083 lbs. to Hamburg; and 11,350 lbs. to Holland.

In the course of this period a Birmingham firm in Espedalen have mined for nickel. About 5000 tons of ore were raised from six mines with 381 labourers and six superintendents; and in two years 370 tons of good nickel ore were shipped to England. The same parties have permission to erect a smelting works to obtain silver from lead and nickel ore. Hitherto this has not been done; and another English firm have taken the abandoned works at Konnerud; and in the year 1850 shipped to England about 35 tons of lead slag, containing copper and silver. The result has not been communicated to the department. The production of chromate of iron has likewise considerably diminished. About 670 tons of this mineral have been annually shipped to England; and it is feared from the competition that there will not be produced sufficient to supply the manufactory for chromate of potash, which has been established in Drontheim since 1831. The average yearly supply to this has been about 450 tons; the cost of manufacture 6000*l.*, and production of chromate of potash 300,000 lbs.; about 70 men, besides superintendents, are employed. There are about 30 lime kilns, some works for the extraction of steatite, mill stones, and grind stones; but their production is all consumed in the country, and is very inconsiderable. The export of granite, which was principally taken to Hamburgh after the fire which destroyed nearly half that city, has entirely ceased, and is now scarcely worth noticing—being only used for grave stones and other trifling purposes. Several slate quarries have been opened, but these likewise have afforded no great results; and, on the whole, the mineral industry of Norway, with the exception of the silver mines of Kongsberg, the property of the State, must be considered to have decreased.

[Note.—In the above account Norwegian money, weights, and measures, have been rendered into English, fractional parts being disregarded, consequently this is only a proximate statement.]

Mineralogical Specimens.—Having recently made a minute inspection of Mr. John Calvert's collection of minerals at his offices, 189, Strand, a brief reference to them may not be unacceptable. They are carefully and scientifically arranged, and beautifully illustrate the mineral resources of Australia, the auriferous rocks of Great Britain and Ireland, as well as presenting specimens of rare minerals from other parts of the world. We observed several fine specimens of malachite, and other ores of copper, both crystalised and amorphous, some choice specimens of silver in various forms, and a large and instructive collection of sulphurets, oxides, and other salts of tin, zinc, lead, nickel, and several other metals. The different gold-bearing strata are most interesting, from the highly auriferous quartz of California and Australia, containing patches of the precious metal, to the rocks of Penmanmawr, in which gold is visible, and those of Wicklow and the gossans of England, in which, though present, it is invisible. In many cases the golden produce has been extracted, placed in juxta-position with a specimen of the rock from which it was taken, and the debris after reduction, thus enabling the spectator to observe closely the indications existing in the matrix, and to form tolerably correct conclusions in examining other metaliferous strata. In the collection are some fine specimens of agates, jaspers, hyalites, cornelians, &c., some of which were obtained from the Macquarrie, and other rivers and ravines in Australia. Mr. Calvert has also a large collection of cut and polished specimens of stones, generally termed precious, and commonly employed in jewellery; they number considerable over 100, consisting of the ruby, emerald, opal, aqua marine, sapphire, garnet, turquois, amethyst, topaz (yellow and pink), and others, probably every stone which has been applied to personal ornament. Upon the whole, the collection is of a highly interesting character, not the least instructive of which are a series of graphic sketches, made in Australia, and some busts and other illustrations of the primitive inhabitants. There is likewise a considerable number of geological and other maps and surveys.

WEEKLY LIST OF NEW PATENTS.

APPLICATIONS FOR PATENTS, AND PROTECTION ALLOWED.

L. J. Anger: Metallic tubing.—W. Eassie: Railway trucks.—W. Crosskill: Carriage wheels.—H. Corlett: Carriage springs.—B. G. Slopes: Separating gold from earthy matters.—C. S. Cahill: Telegraphs.—E. Sharpe: Sifting clay.—J. Norton: Communication between the different parts of railway trains.—H. Brownett: Treating scrap and waste iron.—F. Parkes: Fixing tools in handles.—C. W. R. Rickard: Cocks and taps.—H. Direks: Safety apparatus for boilers and stills.—H. B. Condy: Sulphate of soda, &c., muriatic acid.—Lieut. E. Aitchison, R. N.: Tubes of tubular steam boilers.—O. R. Chase: Pulverizing machinery.—R. A. Smith and A. M'Dougall: Deodorizing sewage, &c.—C. du Motay: Oil from resin.—H. E. Falk: Salt.—T. B. Venables: Earthenware.—P. Spence: Prussiates of potash and soda.—D. Warren: Raising, pumping, or forcing water.—C. J. Edwards: Bands for driving machinery.—A. Shanks: Punching and sheering metals.—J. G. Taylor: Lamps, &c.—J. Getty: Tubular bridges, &c.—J. Westlake: Pulverizing, &c., ores, &c.—A. E. L. Beliford: Bending metal, &c.—E. A. Brooman: Sawing stone and marble; also extracting copper from the ore.—J. Ridgway: Applying heat, &c., to kilns, &c.—W. J. Ellis: Turntables.—J. Bird: Kilns for burning bricks, &c.—W. H. Thornthwaite: Sulphuric acid.—C. Reeves, jun., and W. Wells: Casting metals.

WEEKLY LIST OF PATENTS SEALED.

J. Lallemand, of Besancon—Manufacture of paper from peat.

W. Smith and T. Phillips, of Snow Hill—Improvement in gas stoves.

T. S. Blackwell, of Cranbrook, Kent—Improvements in apparatus for signalising and stoping railway trains. [of smoke.

J. Robertson, of Kentish Town—Improvements in the consumption or prevention

J. Chisholm, of Holloway—Improvements in the distillation of organic substances, and in obtaining products therefrom.

D. Mushet, of Coleford, Gloustershire, and E. Wheal, of Shifnall—Improvements in propelling steam-vessels or other vessels. [with.

R. Holliday, of Huddersfield—Improvements in lamps, and in lanterns used there-

Improvements in Steam-Boilers.—Messrs. Horton and Kendrick have recently patented certain material improvements in steam-boilers, for marine, locomotive, and stationary purposes. In one arrangement for a vertical boiler, numerous water spaces, extending from the circumference to the centre, are made flat-sided, and to taper from the top downwards, so constructed as to be securely connected with the central chimney flue, which offers very considerable advantages over the common vertical boiler. In vertical boilers, made with tubes in the usual manner, a large deposit takes place on the lower tube-plate—difficult to extract, and causing it to be soon burnt out. Many remedies for this state of things have been proposed, but fire-brick domes, collecting vessels, and other expedients have all failed of success. In the boiler under notice the very principle adopted to obtain a greatly extended heating surface, reduces in the same ratio the receptacle for accumulation of calcareous deposit. As the new form of water spaces diminish in size downwards, tapering off to nothing at the bottom end, there is no extended horizontal surface for the sediment to act upon, and the spaces can be kept perfectly clean, without difficulty; moreover, these water spaces being carried, at the upper portion, from the circumference to the centre, and sloping downwards to the fire-bars, present an enormous amount of heating surface, secure an equable and constant distribution of heat, give a free channel for the rapid ascent of the steam, and, consequently, gain a very high and economical evaporative power. For locomotive boilers the angular or taper water spaces, which can be varied to any conceivable shape, are rivetted to the top and sides of the fire-box, affording a most efficient means of staying the same without the cumbersome bridge-stays now in use; this does not diminish the area of the grate, while it very considerably increases the heating surface, where it is most wanted—viz., immediately over the fire. The cylinder or barrel may be filled with horizontal tubes in the usual mode. In the specification is an adaptation of the principle to Cornish boilers, with one or two furnaces, presenting similar advantages of increased heating and also cleaning surface; and these desirable qualities make the improvements particularly well adapted for marine purposes. They are the invention of Mr. Kendrick, the principal foreman at Messrs. Horton and Son's Boiler-Works, New Park-street-Southwark.

Improved Manufacture of Iron.—Mr. Renton, of New York, has patented a new process for the reduction of the oxides of iron, and the production of the malleable metal, founded on the theory of deoxidising the ore in the absence of atmospheric air, and thus preventing the formation of new oxides, which engenders much waste by the usual process of manufacture. The ore is first reduced to powder by stamping, and being mixed with 20 per cent. of mineral coal, is placed in the top of a chamber, from which descend tubes, into which the mixture is suffered to fall, the upper end of the tubes remaining covered with it. This arrangement is acted on by the superabundant calorie from two furnaces employed in other parts of the operation. The oxygen is thus given off by a heat insufficient to melt the ore, and uniting with the carbon of the coal, passes off as carbonic acid gas, when the powdered ore and fuel passes into a furnace below, where it is received on the hearth at a white heat, where it undergoes a gradual welding process at a heat insufficient to cause combination of silex or other impurities. At a proper time it is turned over to the hearth of another furnace, and having been freed from the useless matter in combination with which it descended the tubes, it is puddled, and placed at once under the tilt-hammer, forming blooms of pure wrought-iron. The fires which perform the two last operations, after performing their duties, are found, for the application of judicious economy, to supply sufficient caloric to act on the tubes for the deoxidation of the stone in the tubes. It is said that iron prepared by this process has peculiar advantages for the manufacture of steel.

Steam Hammers.—Mr. R. Taylor, of Reading (U. S.), has patented an improved arrangement of valves, ports, and passages, for operating steam hammers. Mr. Taylor claims:—The arrangement, as described, of the steam ports and passages, the variable automatic valve for directing the steam alternately above and below the piston, and for admitting a variable quantity of steam beneath the piston, and the adjustable hand valve, to exclude altogether the steam from above the piston, or to admit a greater or less quantity of it, both valves being adjustable while the hammer is in operation, so that the steam can be made to act with a variable force on either the up and down strokes of the piston, or of both, or prevented from acting on the down stroke, without interrupting the action of the hammer, as set forth.

Mr. James Watt, of Boston (U.S.), has also taken a patent for an improved valve arrangement for steam hammers. "Mr. Watt claims?—1st, the revolving valve rod, the barrel, and the adjustable screw top, constructed, arranged, and operating in the manner substantially as described, by which I am enabled at any instant to admit the steam beneath the piston during any portion of the fall of the hammer, without altering the effective force and length of the stroke.—2d, I claim in connection with the above the arrangement for throttling the steam on its way from beneath the piston, by which means I am enabled to regulate the intensity of the blow of the hammer to any degree of nicety, or to hold the same suspended above the anvil, in the manner and for the purpose substantially as set forth."

Knife Making.—Mr. D. Ropes, of Meriden (U. S.), has patented an improvement in attaching handles to the blades of table knives. Mr. Ropes does not claim the right of soldering or brazing metallic handles on the blades of knives and forks, nor of uniting handles made of other materials in the ordinary way to the bolsters of table knife and other blades by mechanical means, for both of these have heretofore been done; but what he claims is the use of the metallic cap interposed between the handle and the blade of the knife or fork, and secured to each.

Gold Separator.—Mr. M. Gritzner, of Washington (U. S.), has patented an invention, which consists in the arrangement of two or more screens, one having oblong and the other square meshes, the square meshes to be of the same size of the short diameter of the oblong meshes, for the purpose of separating and retaining the leaf or flake gold, and permitting the balance of the material to be subjected to a blast in uniform or nearly uniform sizes, so as to be differently operated upon by their different specific gravities; also, in the interposition of guide rollers, or their equivalents, between the shaking hopper and the blast, for the purpose of guiding or bringing the material in a proper manner to the blast.

Improved Cultivation of Flax.—The value of the flax crop to the agricultural interest of this kingdom, and more particularly to Ireland, of which the capabilities of the soil to the growth of this plant are so remarkable, renders any improvement or discovery in its cultivation of the utmost importance. A company has lately been formed, under the title of Pownall's Flax Patents Company, for the purpose of bringing into general use a process discovered by Mr. Charles J. Pownall, of Wilton, in the county of Wexford, calculated greatly to advance the flax manufacture, and improve its products. Instead of drying flax after fermentation, as has been hitherto done, by this plan it is subjected, while wet, to repeated pressure by mechanical means, and to the action of a stream of water, by which process the glutinous and resinous matters are expelled from the straw, causing a better yield of fibre in scutching, increasing its value as much as 15*l.* per ton. One great advantage in the process is, that no great outlay in the first instance is required, the only necessary purchase being a simple machine, for wet rolling and washing, its cost not exceeding 20*l.* Trials have been conducted at various steeping establishments which have amply proved that the great increase in value given to the fibre by this patented process, without any additional expense, renders it far superior to any other known mode of treatment. With the view to encourage the general use of the process, the company grant licenses at very moderate royalties; and printed directions for the proper management of the flax crop are issued by them. Chemical investigation has shown that the fibre of flax does not abstract from the soil so much of its fertilising properties as some other cultivated crops: to supply the elements which the plant requires, and to leave the land in the same state of fertility as before, the manure recommended for a statute acre is 30 lbs. muriate of potash, 28 lbs. chloride of sodium, 34 lbs. calcined gypsum, 54 lbs. bone-dust, and 56 lbs. sulphate of magnesia, costing in all about 10s. 6d. Every information is given as to the management of the soil and rotation, the sowing, manuring, weeding, and pulling, with the best means of stacking to keep it uninjured, and its final manufacture before spinning.

West-End and Crystal Palace Railway Company.—This company have entered into an agreement with the Brighton Company, by which the former company are to receive a rental of 8000*l.* per annum for the use of the line for their through traffic only; therefore, exclusive of intermediate, Crystal Palace, and South-Eastern traffic. The cost of constructing the line, as estimated by Messrs. Bidder and Fulton, the engineers, is to be 400,000*l.*; therefore the 8000*l.* is equivalent to a guarantee of 2 per cent. per annum. Besides this, the Brighton Company have agreed to work the West-end line at the rate of 42½ per cent. upon the gross traffic receipts, the charge made by the Eastern Counties for working the Eastern Union being 47 per cent. The works are to be commenced in the spring, and it is calculated the line will be opened in about 18 months from the proposed station at Chelsea new bridge to the Brighton Railway at Sydenham.

Railway Traffic.—The traffic returns of railways in the United Kingdom for the week ending Feb. 4, amounted to 310,586*l.*, and for the corresponding period of last year to 273,617*l.*, showing an increase of 36,969*l.* The gross receipts for the eight railways having their termini in the metropolis amounted to 140,749*l.*, and for the corresponding week of last year to 123,909*l.*, showing an increase of 16,840*l.* The increase on the Eastern Counties Railway amounted to 738*l.*; on the Great Northern, to 520*l.*; on the Great Western, to 2635*l.*; on the London and North-Western, to 4739*l.*; on the London and Blackwall, to 193*l.*; on the London, Brighton, and South Coast, to 758*l.*; on the London and South-Western, to 776*l.*; and on the South-Eastern, to 1791*l.*; total, 16,840*l.* The receipts on the other lines in the United Kingdom amounted to 169,837*l.*, and for the corresponding week of 1853 to 149,768*l.*; showing an increase in the receipts of these lines of 20,129*l.*, which, added to the increase on the metropolitan lines, makes the total increase 36,969*l.* over the corresponding week of 1853.

VALUABLE FEE-SIMPLE ESTATE.—TO BE SOLD, on the 21st February, in the INCUMBERED ESTATES COURT, Dublin, the HUTCHINSON ESTATES, situated within two miles of Bantry, containing 3610 acres, and producing a nett rental of £357 per annum. The mines are of great value.—For further particulars, apply to Mr. Orpen, 41, North Great Georges-street, Dublin; and to Mr. Preston White, 18, Adam-street, Adelphi, London, where reports and specimens of the ore may be seen. 63

SITHNEY WHEAL BULLER TIN MINE, NEAR HELSTON, CORNWALL.—FOR SALE, FIFTY SHARES.—Address, "A. B.," *Mining Journal* office, 26, Fleet-street, London. 64

SITHNEY WHEAL BULLER TIN MINE.—A FEW SHARES in this rich and fast improving MINE FOR SALE.—Apply by letter only, prepaid, to F. C. Fairfield, Denmark-hill, Camberwell. 65

FOR SALE,—THREE (64th) SHARES in a valuable CARDIGANSHIRE LEAD MINE. Average returns 90 tons per month. Last half-year's dividend £60 per share; and rapidly improving. Price £1300.—Apply to Mr. BELL WILLIAMS, 16, Castle-street, Liverpool. 66

MR. E. S. BOYNS, AUCTIONEER, MINING, AND SHARE-BROKER, GENERAL AGENT, &c., PENZANCE, CORNWALL. Mines inspected, and every information furnished. 67

THOMAS FRANCIS COOK, STOCK AND SHAREBROKER, STOURPORT, HAS FOR SALE:—15 Great Bryn Consols (£1⅞ paid); 10 East Alfred Consols (all calls paid); 25 Tamar Maria (new issue, present call paid); the lot at £30 nett. Also, £400 Stock in the Oxford, Worcester, and Wolverhampton Railway. 68

MESSRS. THORLEY AND CO., OFFICE OF MINES, 63, GRACECHURCH STREET, will SELL the following SHARES:—

200 North Hingston, 4s. 6d.	250 Wheal Fortune, 4s. 6d.	300 Quintr. Downs, 10s. 6d.
50 Wheal Catharine, 15s.	230 Tresellyn, 3s. 3d.	5 Messer, £105.
300 Perran Silver-lead, 6s.	100 Mizen Head, 4s. 6d.	100 North Tamar, 5s.
50 East Bosorn.	100 Augusta, 5s. 6d.	100 Wheal Sarah.

Also, FOR SALE, ON COMMISSION:—Silver, Lead, and Copper Setts in Cornwall and Ireland; Silver Mines in Sardinia; Magnetic Iron Ore Mountain, 50 to 60 per cent. rich, on the shores of the Mediterranean; Slate Quarries and Collieries; Mineral Lands in Australia; and Shares in Mining Patents.

N.B. Assistance given in the formation of companies to work good mining properties. Board-rooms, and Foreign Mining Journals.

Office of Mines, 63, Gracechurch-street. 69

WHEAL MESSER.—Mr. W. CHARLES HAS SHARES FOR SALE in the above valuable MINE. And also in the following important MINES:—viz., Great East Wheal Rose, Great Sheba Consols, Bodmin United, West Par Consols, Perran United, Wh. Tehidy, East Caradon, St. Blazey Consols, Caylan, Cubert United, Wheal Peru, Perran Silver-lead, Keswick, Langford and Baring, and others.

Mr. W. CHARLES is a BUYER in Marke Valley, Great Crinnis, Union Tin, West Crinnis, Coosheen, and others.—27, Austinfriars, London, Feb. 10, 1854.

MR. JAMES FOX, NEW CITY CHAMBERS, 121, BISHOPSGATE STREET, has FOR SALE:—10 Hope Valley, £5; 5 Nant-y-Car, £4 10s.; 1 East Darren, £95; 100 Trenault, 12s.; 50 Tremollett Downs, 10s.; 3 Carvannall, £9; 30 Mostyn, 8s. 6d.; 25 Dyfngwm, £8; 20 West Wheal Arthur, 13s.; 20 Keswick. £3; 20 Altgoed Slate, £2 2s.; 50 Whitford, 8s. 6d.; 100 Clive United, 5s.; 15 Wheal Carpenter (South Sydenham), £7 10s.; 5 West Wheal Towan, £25; 1 Cefn Brwyno, £110; 10 East Wheal Leisure, £10; 10 Goginan, £15 10s.; 50 East Bosorn, 6s.

English and Foreign Mines and Securities dealt in for cash. 71

MESSRS. DICKINSON AND CO., SHAREBROKERS, No. 114, BISHOPSGATE STREET (Corner of Threadneedle-street), LONDON, have FOR SALE:—Quintrell Downs, 8s. 6d.; Perran Silver-lead, 6s.; Britannia, 13s.; Molland, 8s. 6d.; Tremollett Down, 8s. 6d.; Trenault, 10s. 6d.; Cwm Darren, 16s.; Great Wheal Vor, 17s.; Poltimore, £1 2s. 6d.; East Tamar, 13s. 6d.; Wheal Unity, £3; West Polberro, £2; West Providence, £38; Liguanea of Jamaica, 7s. 6d.

And are BUYERS of Devon United, Ivy Tor Consols, Gawton United, West Ding Dong, East Wheal Alfred, Red Dragon.

Every description of English, Irish, Welsh, and Foreign Mining Shares and Stocks, bought and sold at close prices. Cash advanced on shares and stock for long or short periods.—Offices of the Ludgvan Lease Tin Mine, St. Ives. 72

FIRST REPORT—ENGLISH AND IRISH MINES.—The undersigned having added to their general business the SALE and PURCHASE OF SHARES in public companies, have come to the determination, from the varied and conflicting reports giving to the public of progressive mines, to send, on their own account, a person of talent and experience in the practical working of mines, to examine into, and ascertain, as much as possible, the true and real state of each mine in England and Ireland, so that they may be able to give their friends and customers truthful information, and honest and *bona fide* advice. Their agent has now made his first report, enabling the undersigned to understand the present state, as well as future prospects, of almost every mine in England and Ireland. The undersigned will not, in any instance, accept of an order to buy or sell shares in any mine of which they have received a bad or doubtful report, or permit in their office the sale of shares in any project of a doubtful character. 73

The undersigned continue their usual business as COMMISSION AGENTS and BROKERS, and have ON SALE a good deal of MINING MACHINERY; they also BUY and SELL MINES, and all kinds of MINERAL PROPERTY.

DICKSON, RUTHVEN, and CO., 4, Corbet-court, Gracechurch-street, London.

MINING SHARES FOR SALE.—The undersigned is enabled to TRANSACT BUSINESS in the following MINES:— 74

50 Lamerton, 10s. 6d.	100 N. E. Crownd., 10s. 6d.	20 Churchstoke, 14s.
100 Wood, 7s. 6d.	100 North Hingston, 4s.	20 Langford, 8s. 6d.
100 Sarah, 3s.	50 Molland, 8s. 6d.	20 Devon United, £2 15s.
10 Exmoor Eliza, 21s.	20 Sortridge, £1.	50 Combmartin, 8s. 6d.
	200 West Sortridge, 5s. 6d.	

N.B. Low-priced shares in other mines of good promise, subject to only small periodical calls, to be had on application; and impartial advice given as to their merits when required. Instructions to buy or sell promptly executed.

Letters addressed (post paid) to CHARLES GURNEY, mining share dealer, No. 4, Corbet-court, Gracechurch-street, London, will meet attention.

WOVEN BADGES FOR RAILWAY OFFICERS, &c.—Messrs. Dart and Son, coach-lace makers, have just specified under the letters patent granted to them for the adaptation of loom machinery to the production of badges, and weaving letters and numbers into textile fabrics, which invention is stated to consist in the use of the loom for the production of a series of letters and numbers to any extent, without alteration to the original setting-up; this is effected by mounting the loom for the nine digits and the cypher (0), so that any number can be taken and woven into the fabric when required, thereby removing the great difficulty which has hitherto always presented itself in weaving badges. In the case of the adaptation of this invention to a garment, a piece of the desired size and form may be thus woven, and then attached to the same, forming part of it. The invention may also be applied to many other purposes than badges for officers—for instance, the porches in the Panopticon Institution are being badged by this means.

* THE EMPEROR OF FRANCE, AND ENGLISH MECHANICAL SCIENCE.—Last year the National Institute of France honoured Mr. Fairbairn, the eminent engineer of Manchester, by electing him one of its corresponding members, and that gentleman is now in Paris for the purpose of taking his seat in the Academy. On Saturday last he received an Imperial command to attend at the Tuileries, and was honoured by a lengthened interview with the Emperor. His Majesty made minute enquiries as to the progress of mechanical science in England, and at parting presented Mr. Fairbairn with a diamond box, marked with the Imperial initials, as a mark of esteem, and a recognition of the eminent services the engineer had rendered to science. No one knows better than the Emperor how to tune a compliment, which will be widely appreciated by the middle classes in England.

CHEMICAL RECREATIONS.—Mr. John J. Griffin, of Finsbury-square, F.C.S., and honorary member of the Philosophical Society of Glasgow, has just published the 10th edition of a volume under the above title, being the first division of a Popular Manual of Experimental Chemistry, illustrative of elementary experiments. It is particularly suited to two classes of readers—students attending lessons or lectures on chemistry, and schoolmasters who are desirous of teaching the elements of chemistry in popular lectures or experimental lessons, both of whom will find useful information in its pages. Ample descriptions are given of all the simple elements, of air, earths, water, acids, and salts; illustrative examples are detailed for performing numerous experiments with facility, success, and economy, and many diagrams serve to describe the necessary apparatus and utensils comprising new and simplified instruments, intended to aid the researches of young chemists. That portion of the work descriptive of elementary experiments is in itself novel and important, being written in a peculiar and popular style, to show in what manner the elements of practical chemistry can be taught to large classes of students in schools; and is not confined to mere chemical recreations or demonstrative experiments, but includes much information relative to analytical processes, particularly to a new method of preparing test liquors of fixed strength, and of applying such liquors by means of graduated decimal measures to the rapid analysis of acids, alkalies, and salts. It gives elaborate and useful tables of decimal measures, the preparation of standard solutions, and of the principal acids; tables of the solubility of acids and alkalies, of test equivalents, &c. The first portion of the volume is devoted to a consideration of the nature, objects, and uses of chemistry, different chemical substances, variety of compounds, causes of decomposition, the atomic theory, and atomic weights. Examples of chemical operations in solution, evaporation, precipitation, crystallisation, effervescence, deliquescence, efflorescence, and the qualitative analysis of salts. The work will be published in three divisions, of which, as before stated, this is the first; the second will be devoted to the metalloyds, and their combination with each other; to air, water, the acids, and gases; and the third to metals and their compounds. It would be superfluous here to dilate on the importance of the science of chemistry, or the necessity in this age of advanced knowledge of making it a staple branch of popular education, which is now generally admitted; suffice it to say, that the author has met with a most favourable reception in nine former editions, and has in the tenth evidently endeavoured, by communicating every information acquired up to the present time, to render it worthy of continued patronage, and to entitle it to rank in the scientific library as a little work of practical utility.

HOLLOWAY'S OINTMENT AND PILLS HAVE EFFECTUALLY CURED A WOUND IN THE LEG, AND PREVENTED AMPUTATION.—The following extraordinary cure was communicated by Capt. Smith, of Yarmouth, to Mr. Dixon, chemist, Norwich. Mr. John Walton, late in her Majesty's service in the British fleet at Malta, had an ulcerated wound in the ancle, for which he was in Malta hospital six months, afterwards in Portsmouth hospital for four months. Here, as at Malta, refusing to have a limb amputated, he was turned out incurable. Other medical gentlemen failed also, when, by Capt. Smith's recommendation, he tried Holloway's Ointment and Pills, which in three months cured him, and he is now in perfect health, and coast-guard officer at Newhaven.—Sold by all druggists; and at Professor Holloway's establishment, 244, Strand, London. 75

RAILWAY WAGONS.—WM. A. ADAMS, MIDLAND WORKS, BIRMINGHAM.

BROAD AND NARROW GUAGE COAL AND IRONSTONE WAGONS, *IN STOCK—FOR SALE OR HIRE.* 76

NORRIS'S PATENT RAILWAY CHAIR COMPANY beg to draw the attention of railway companies and engineers to NORRIS'S PATENT RAILWAY JOINT CHAIRS. This patent has received the unqualified approbation of some of the most eminent engineers of the day, as the most effective, economical, and perfect joint in use at the present time. The simplicity of its construction is such as will allow of its application to any line of railway, without causing the slightest hinderance to the ordinary traffic during the time that it is being laid down.

The saving in the preservation of the permanent way and rolling stock by the application of Norris's Patent is incalculable; and wherever adopted must very considerably decrease working expenses.

To railway companies, having old and bad roads, the principle is peculiarly advantageous, as its application will not only restore the road to a perfectly safe and serviceable state for many years, but, at the same time, bring into efficient use all the old and broken chairs.

To the railway world in general it is of the greatest value, as it admits of the easiest locomotion, and is most simple and economical in principle.

Every information will be given, and models forwarded for inspection, on application to the manager, at the offices of the company, Wolverhampton. 77

WILLIAM THOMPSON'S SON AND CO., CARDIFF AND NEWPORT,—SHIPPERS OF IRON, COAL, AND COKE. 78

WEST CORNWALL RAILWAY.—NEWHAM BRANCH.—The DIRECTORS OF THE WEST CORNWALL RAILWAY will receive TENDERS for the CONSTRUCTION of the NEWHAM BRANCH of this RAILWAY, a length of about 2 miles 5 furlongs. Drawings and specifications may be seen, and further information obtained, at the office of the engineer (I. K. Brunel, Esq.), 18, Duke-street, Westminster, on and after Thursday, the 9th inst. The tenders are to be addressed to the Directors of the West Cornwall Railway Company, and delivered at the secretary's office, 38, Throgmorton-street, on or before Saturday, the 25th inst.—Feb. 7, 1854. FITZGERALD CHURCH, Sec. 79

ANTWERP AND ROTTERDAM RAILWAY COMPANY.—FIFTH CALL OF ONE POUND (making £8 paid up).—The Board of Directors of this company beg to inform the shareholders that a CALL of TWENTY-FIVE FRANCS, or ONE POUND, per share has been decided upon, which will be PAYABLE on the 16th day of February next. The payments can be made in London at the bank of Messrs. Masterman and Co., 35, Nicholas-lane; in Brussels, at the bank of Messrs. Matthieu and Son; in Paris, at the bank of Messrs. Martineau, 18, Rue de Provence; and in Rotterdam, at the bank of Messrs. Ezechiels and Son.

It is necessary that the certificates held by such shareholders as may be desirous of paying to the London bankers of the company be produced at the offices, 16, Cannon-street, City, five clear days before the date of payment. Interest at the rate of 5 per cent. per annum will be charged on all arrears of call.

By order, RIXON AND SON, Solicitors to the Company.

11, King William-street, London, Jan. 14, 1854.

THOS. SPENCER, VULCAN IRONWORKS, WEST BROMWICH, STAFFORDSHIRE, MANUFACTURER of RAILWAY WHEELS and AXLES, SCRAP TYRES and AXLES, ALL KINDS of HAMMERED IRON for MARINE and other ENGINES, SHAFTS, and HEAVY IRONWORK.—SOLE MAKER of CAMBER'S PATENT WROUGHT-IRON RAILWAY WHEELS. 81

MR. JOSEPH HENDERSON, C.E., and MINING ENGINEER, of GATEHOUSE OF FLEET, KIRKCUDBRIGHTSHIRE, SCOTLAND, undertakes to INSPECT, REPORT, and SURVEY any MINES or MINERAL PROPERTY in SCOTLAND. No objection to take the management of any mine or mines in the neighbourhood of Gatehouse of Fleet. 82

TO IRONMASTERS AND OTHERS.—An EXPERIENCED PERSON is desirous of meeting with an ENGAGEMENT as MANAGER of BLAST-FURNACES and IRON FOUNDRIES. He has been long employed in the conduct of works of this nature (combining also the manufacture of coke), and can furnish unexceptionable testimonials as to ability and character.—Address, "J. P.," care of Mr. Alfred Thomas, 29, Berner's-street, Oxford-street. 83

IRONWORKS.—WANTED, an ENGAGEMENT as FORGE MANAGER, or otherwise, by one who has had an extensive and long continued practical experience in the business in all its branches.—Address, "A. B.," Crown and Anchor, Bull Green, Halifax, York. 84

WANTED IMMEDIATELY, a good PRACTICAL MAN, not above 35 years of age, thoroughly acquainted with the method of working and ventilating coal mines, as UNDERGROUND BAILIFF, or OVERMAN, and to make himself generally useful under the direction of the manager.—Application, with references as to capabilities, sobriety of character, &c., to be made to "A. Y. Z.," Merthyr Tydvil, South Wales. 85

WANTED,—A COMMISSION AGENT, to INTRODUCE an IMPORTANT and SUPERIOR ARTICLE, now in much request by MINING PROPRIETORS. A gentleman of influence and respectability, whose references are approved, will be furnished with particulars by addressing E. STANLEY, 14, Pembury-road, Hackney. 86

TO MINERS.—WANTED, an EXPERIENCED PERSON to SUPERINTEND and DIRECT the WORKING of a MINE of SULPHUR ORE in North Wales. Salary £150 per annum.—Apply to Mr. N. BRODIE, Pastelyn, near Rhyl, North Wales. 87

TO PARENTS AND GUARDIANS.—A VACANCY is now open for a PUPIL in the office of a CIVIL ENGINEER. The instruction comprises Civil and Mechanical Engineering; Surveying; Drawing; Taking out Quantities; Estimating; Mechanics and Rudimental Chemistry.—Address, W. H. WALKER, 7, Duke-street, Adelphi. A premium will be required. 88

TO OWNERS OF CHEMICAL WORKS AND SMELTING ESTABLISHMENTS.—WANTED, by a person who has had upwards of eight years' experience in all kinds of chemical analysis and assaying, an ENGAGEMENT to SUPERINTEND the LABORATORY OPERATIONS in an ALKALI or COLOUR MANUFACTORY, or SMELTING WORKS, or in any situation where a thorough knowledge of chemistry may be required.—Apply to "B. W. J.," 72, Pilgrim-street, Newcastle. 89

OLD BOILERS, OR STEAM-BOAT FUNNELS.—WANTED, a FEW OF THE ABOVE, from 4 to 6 feet diameter, any length.—Apply to Stothert, Rayno, and Pitt, Bath. 90

TO CONTRACTORS, &c.—ON SALE, a quantity of WROUGHT IRON TYRED WHEELS, 2 ft. 6 in. diam., with 3 in. axles, 4 ft. 8½ in. gauge (inside bearings), in excellent condition. Price £6 10s. per sett.—Apply to Thos. PEARSON and Co., Liver Iron-Works, Boundary-street, Liverpool. 91

IRONSTONE.—FOR SALE, an UNLIMITED QUANTITY of WELSH IRONSTONE, yielding about 35 per cent.—For price and further particulars, apply to Mr. FAIRBURN, Hartshead, Sheffield. 92

BARYTES.—SULPHATE OF BARYTES, of a very superior quality, can be HAD in the MINERAL from a mine in North Wales.—For price, apply to Mr. J. FAIRBURN, Hartshead, Sheffield. 93

MUNDIC AND GOSSAN.—FOR SALE, 20 tons of MUNDIC and 100 tons of GOSSAN, both highly auriferous, from a mine in Devonshire. Samples may be had on application to Mr. W. Moxey, Bartholomew-street, Exeter, by whom tenders for the same will be received. The sellers will deliver it free on board at Exeter Quay. 94

STEAM-ENGINES FOR THE COLONIES.—TWO STRONG BUILT SIDE LEVER ENGINES, of 60-horse power collectively, with boilers nearly new, not having been used more than six times, TO BE SOLD CHEAP.—For further particulars, apply to T. ROSE, Marine-terrace, Jersey. 95

CAPT. THOMAS DUNN, of TAVISTOCK, undertakes to INSPECT, REPORT, and SURVEY any MINES or MINERAL PROPERTY in ENGLAND, IRELAND, SCOTLAND, or WALES. No objection to take the management of any mine or mines in the neighbourhood of Tavistock. 96

EAST INDIAN IRON COMPANY.—Notice is hereby given, that the FIRST ANNUAL GENERAL MEETING of the EAST INDIAN IRON COMPANY will be HELD at the offices of the company, No. 33, New Broad-street, London, on Monday, the 20th day of February inst., at Two o'clock P.M. precisely, in conformity with the terms of the Company's Charter and Deed of Settlement.

The Transfer-books of the company will be closed from the 12th to the 20th day of February, both days inclusive. By order of the Board,

Feb. 1, 1854. G. E. COOPER, Sec. 97

WHEAL GILL MINE.—FOR SALE, FOUR HUNDRED AND THIRTY SHARES in this MINE, at a low figure, apply by letter, with price, to "A. B.," Post-office, Cheapside. 98

KENMARE AND WEST OF IRELAND MINING COMPANY.—Notice is hereby given, that the ORDINARY GENERAL MEETING of this company will be HOLDEN at their office, 62, Moorgate-street, City of London, on Tuesday, the 14th day of February inst., at One o'clock precisely, to receive the Report of the Directors and the half-year's accounts; to elect a director in the room of G. F. P. Sutton, Esq., who retires by rotation; and also for transacting the general affairs of the company. G. F. P. Sutton, Esq., being eligible offers himself accordingly. By order of the Board, J. REYNOLDS GWATKIN, Sec.

Kenmare Mining Office, 62, Moorgate-street, Feb. 7, 1854. 99

NORTH CARADON MINE.—Notice is hereby given, that a SPECIAL GENERAL MEETING of shareholders will be HELD, at the offices, No. 4, Great Winchester-street, at Eleven o'clock precisely, on Thursday, the 23d Feb. inst. 100

RED DRAGON MINE.—Notice is hereby given, that a MEETING of the adventurers in this mine will be HELD at the offices, 4, King-street, Cheapside, on Tuesday, the 14th of February, at One o'clock precisely, for the general business of the company. By order of the Committee,

4, King-street, Cheapside, Jan. 28, 1854. WM. H. SMITH, Purser. 101

COPIAPO MINING COMPANY.—Notice is hereby given, that the HALF YEARLY MEETING of the shareholders will be HELD at the offices, 2, New Broad-street, on Friday, the 24 February, at Two o'clock precisely.

By order of the Directors, EDWARD J. COLE, Sec.

London, Jan. 27, 1854. 102

FLINTSHIRE.—VERY IMPORTANT AND EXTENSIVE SALE AT THE MILWR MINES, NEAR HOLYWELL,

And about 3 miles from the Holywell Station, on the Chester and Holyhead Railway.

MR. BELL has the satisfaction to announce, that he has been favoured with instructions to SELL, BY PUBLIC AUCTION, on Tuesday, the 14th day of February, 1854, at Eleven o'clock in the forenoon precisely, on the premises above-described, FOUR valuable STEAM-ENGINES, for pumping, winding, and crushing; EIGHT BOILERS, WEIGHING MACHINE, BLOCKS, SMITHS' TOOLS, PIT-WORK, and OTHER MATERIALS, belonging to the said MINES, as particularly set forth in the following catalogue, subject to such conditions as will be then and there produced, and in the following or such other lots as may be agreed upon at the time of sale.

The catalogue above referred to:—

LOT 1. A 70 in. HIGH-PRESSURE STEAM EXPANSIVE CONDENSING ENGINE, with skeleton valves, 10 ft. stroke of piston, and 9 ft. in the pump, with steam case condense water-pipes, and regulating valves for delivery into the boilers; four cylindrical boilers with hemispheric ends, each 30 ft. long and 5 ft. diameter; steam-pipes, regulating and shut-off valves, safety-valves, feed pipes, feed regulating and shut-off valves, complete, with double power winch in engine-house, and all wood work therein, and first piece of main rod, balance-bob, &c. This engine was made at the Hayle Foundry, Cornwall.

LOT 2. 40 fms. of 13 in. main rods, rod-plates and bolts.

LOT 3. 42 fms. of 8 in. house plunger feed lift, capstan and shears. 103

LOT 4. Cathead capstan.

LOT 5. 130 fms. of 12 in. 4 strand shroud laid rope.

LOT 6. A 63 in. HIGH-PRESSURE EXPANSIVE CONDENSING STEAM-ENGINE, 8 ft. stroke of piston, and 8 ft. in the pump; three cylindrical boilers with hemispheric ends, each 30 ft. long and 4½ ft. diameter, steam-pipes, regulating and shut-off valves, feed pipes, safety-valves, &c., complete, with wood work in engine-house, first piece of main rod, balance-bob, and capstan and shears. This engine was made at Hawarden Foundry, Flintshire, and has undergone thorough repair within the last two years.

LOT 7. 40 fms. of 12 in. main rods, rod-plates, bolts, &c.

LOT 8. 32 fms. of 8 in. plunger feed lift.

LOT 9. 20 fms. of 17 in. drawing lift, 18 in. pumps, clackpiece and windbore, with suitable buckets, bucket-rods, changing and hanging parts.

LOT 10. A 20 in. HIGH-PRESSURE CONDENSING WINDING and CRUSHING STEAM-ENGINE, 4 ft. stroke, with cage, ropes, chains, and gearing, wrought-iron beam, bright hand-gear and parallel motion, brass air-pump and bucket, cylindrical boiler with hemispheric ends, 20 ft. long and 4 ft. diam., with steam and feed pipes, complete. This engine was made at the Gospel Oak Foundry, Staffordshire.

LOT 11. A connecting crank fly-wheel, 12 ft. diam., and driving gear, with an 18 in. first-rate set of lever crushers for lead or copper ore crushing.

LOT 12. A 5 in. cylinder, 14 in. stroke, HIGH-PRESSURE ENGINE, with fly-wheel and driving drum.

LOT	LOT
13. Capital weighing machine up to 4 tons.	29. 1 set 3, 2, and 1 sheaved blocks, for 7 in. rope.
14. 16 fms. of 19 in. pumps.	30. 1 set 3, 2, and 1 ditto, for 5 in. rope.
15. 1 18 in. working-barrel.	31. 1 set 3, 2, and 1 ditto, for 4 in. rope.
16. 2 18 in. plunger-poles.	32. Lot of bevel cutter and screw chains for pumps.
17. 1 18 in. stuffing-box and gland.	33. A quantity of pipes of various dimensions (in lots).
18. 1 19 in. H-piece in two parts, clackpiece, doors, dead bottom, &c.	34. 20 fms. of 17 in. drawing lift.
19. 1 16 in. plunger-pole, with brass bushed stuffing-box and gland.	35. 20 fms. of 18 in. drawing lift.
20. 40 fms. of 7 in. flange pipes.	36. 10 fms. of 18 in. drawing lift.
21. 30 fms. of 4 in. flange pipes.	37. 30 fms. of 18 in. plunger lift.
22. 3 smiths' bellows.	38. 130 fms. of ⅝ whim chain.
23. 3 anvils, at per cwt.	39. 130 fms. of flat rope.
24. 2 vices.	40. 2 steam-engine counters.
25. Quantity of brass, at per cwt.	41. Quantity of main rod-plates and bolts, suitable to 12 and 13 in. wood rods.
26. Quantity of wrought-iron rails, 2 in. by ⅝, cwt.	42. 2 whim water-barrels, 60 gals. each.
27. Scrap wrought and cast-iron, at per	43. Quantity of whim ropes.
28. 1 set 2, 3 sheaved blocks, with leader for 8 in. rope.	44. Sundry mining materials.

The whole of the before-mentioned machinery has been at work within the last few months, is in excellent condition, and of the most improved and latest construction. The rope (Lot 5) is of the best material, and was manufactured expressly for and used in raising the tubular bridges at Bangor, on the Chester and Holyhead Railway.

Tickets of admission to view the same, as well as any further information, may be obtained at the Milwr Mine Company's Office, near Holywell; or from Mr. Bell, auctioneer and appraiser, 11, Panton-place, Holywell.

WHEAL MARY EMMA TIN MINE, LYDFORD, DEVON.

MR. SADGROVE WILL SELL, BY AUCTION, without reserve, on Friday, the 17th inst., at Two o'clock in the afternoon, at the offices of the Company, 17, Gracechurch-street, City, this EXTENSIVE SETT, held under dues of 1-18th from the Duchy of Cornwall. The sett comprises TWO rich TIN LODES and ONE LEAD LODE, several tons of which have been raised, and realised the highest price given in the market. The shafts are well timbered, and the machinery and materials are nearly new and in good working order, comprising:—A WATER-WHEEL, 40 ft. diameter, 2 ft. breast, very good and complete; 8 heads stamps; 112 fms. iron rods; whim kibbles; 10 fms. pumps; smiths' and miners' tools; tackle, &c.; smiths' and carpenters' shops, and other buildings. This mine can be put to work for a very small outlay.—For further report and particulars, apply to Mr. Henry Gibson, purser, 17, Gracechurch-street; or to Mr. Frederick Sadgrove, 37, Old Broad-street; or Capt. Jas. Carpenter, Tavistock. 104

MINERAL PROPERTY FOR SALE.—TO BE SOLD, on the 21st of February, in the INCUMBERED ESTATES COURT, Dublin (if not previously disposed of by private contract), the FEE-SIMPLE ESTATES of the late ARTHUR HUTCHINSON, on which are valuable silver-lead mines. The sett extends over 3600 acres; great facilities exist for working these mines. The lead ore contains about 20 ozs. of silver to the ton. The estate is situated within two miles of the town of Bantry.—For further particulars, apply to Mr. Orpen, 41, Great Georges-street, Dublin; and to Mr. George Preston White, 18, Adam-street, Adelphi, London, where reports and specimens of the ore may be seen. 105

TO BE SOLD, BY PRIVATE TREATY, the SETT of the NORTH WHEAL BULLER, or GREAT SOUTH TOLGUS MINE, situate near Redruth, Cornwall, with the steam-engine, materials, &c., in one lot.

Apply at the mine, to Capt. William Sincock, or Jno. Haye, Esq.; or to E. Yates, 3, Clayton-square, Liverpool. 106

TO ENGINEERS, &c.—TO BE SOLD, OR LET, A FIRST-RATE CONCERN, IN FULL OPERATION, with FOUNDRIES, &c., doing a good trade, within 20 miles of Birmingham. A comparatively small capitalist will find it a rare opportunity.—Apply, free, to Mr. John S. Dunn, Coventry; or Mr. Chas. Seymour, Bull-street, Birmingham. 107

VALUABLE CANNEL AND KING COAL MINES, TO BE LET, lying under an estate in the township of Blackrod, in the county of LANCASHIRE: the estate is from 20 to 30 acres, statute measure, and near to the Lancashire and Yorkshire Railway; the mines will be drained dry by the collieries in the neighbourhood. To view the property, and for further information, applications to be made to John Silvester, Esq., Atherton; or to Mr. James Whittle, colliery viewer, Hill Cottage, Charnock Richard, near Chorley. 108

VALUABLE MINE SHARES.—TO BE SOLD, VERY CHEAP, THIRTY (1070ths) SHARES in WHEAL ENYS, some of which have been sold in the immediate vicinity at £11 11s. each; also, TWO (246ths) in MENGEARNE AND TREGUNSTIS; and TWENTY-FIVE (2400ths) in PORKELLIS UNITED; all in the parish of Wendron (all calls paid, and free of commission). To parties unacquainted with these mines, it may be well to observe, there are few more promising in the county; and the circumstances under which the shares are now offered present an opportunity for investment which seldom occurs.—Offers for all, or any, of the above, addressed to "A. B.," care of Mr. Williams, auctioneer, accountant, mine and sharebroker, Green Bank-terrace, Falmouth, will receive prompt attention. 109

WATERSIDE PREMISES.—TO MANUFACTURERS, ENGINEERS, TIMBER MERCHANTS, and others, requiring wateraide premises and railway communication. The Birkenhead Dock Company are prepared to LET, ON LEASE, in lots to suit tenants, LAND FRONTING the BIRKENHEAD GREAT FLOAT, and connected by railway with all parts of the kingdom. The land has especial advantages for sugar refiners, saw-mills, timber-yards, engineers, &c., and is accessible by ships of large burthen. No dock dues are chargeable on goods landed or shipped in these docks. By order, W. H. SLOMAN, Sec.

Birkenhead, Feb. 6, 1854. 110

MINERALS TO LET—MANOR OF WALL TOWN.—TO BE LET, for such a term of years as may be agreed upon, all those valuable SEAMS of COAL and IRONSTONE, VEINS of LEAD ORE, LIMESTONE, and FREESTONE QUARRIES, and OTHER MINERALS, lying within the Manor of Wall Town, in the parish of Haltwhistle; and county of Northumberland, comprising about 3000 acres, and situated within two miles of the Newcastle and Carlisle Railway.—Thos. Robson, the gamekeeper at Wall Town, will show the boundaries of the Manor; and further particulars may be known on application to Mr. Sample, at Matfen, near Corbridge, by whom offers in writing will be received until Thursday, the 2d March next.—Matfen, Feb. 8, 1854. 111

MR. G. GIDLEY, STOCK AND SHAREBROKER, TORQUAY, DEVON, has ON SALE SHARES in DIVIDEND MINES, that will pay the purchaser from 15 to 20 per cent. Also, in PROGRESSIVE MINES, in which valuable and important discoveries of gold have been made. 112

Mines inspected by the most experienced agents, and every information furnished.

MR. BRENCHLEY has instructions to OFFER FOR SALE, at the current market price of the day:— 113

Alfred Consols	Castle Dinas	Treweatha	Wheal Uny
Augusta Consols, 8s.	Cwm Darren	Tavy Consols	Wheal Golden
Bell and Lanarth	Guskus	Trebell	Wheal Treasury
Bedford	Gonamena	Treleigh Consols	Quintrell Downs
Balnoon	Garras	Tremollett	East Russell
Cubert	North Trelawny	Wheal Zion	

Purchases and sales effected on shares generally. Every information afforded as to those mines most likely to realise a profitable return.

2, Pinner's-court, Old Broad-street, Feb. 10, 1854.

MINING INVESTMENT.—T. FULLER AND CO., 51, THREADNEEDLE-STREET, LONDON, beg to call attention to the favourable opportunity of INVESTING in BRITISH MINES, particularly in those dividing their profits every two or three months, which average from 15 to 20 per cent., with every prospect of continuance, and being free from fluctuation, such as Consols, railway, and other securities; and respectfully direct attention to the PURCHASE of SHARES in many PROGRESSIVE MINES, being in full operation, with efficient machinery, &c., for the development and bringing the same into a profitable state of working, which, at present prices, cannot fail to remunerate all who invest; a careful selection of such alone can be obtained by a daily communication with agents of high scientific and practical experience of the principal mines in Devon, Cornwall, and Wales.

T. FULLER and Co. will furnish every information to capitalists, either personally or by letter, and can effect purchases or sales of every description. 114

THE STEANDER FLAX MILLS, LEEDS.
TO FLAX SPINNERS, MANUFACTURERS, AND OTHERS. 113
IMPORTANT SALE of the WHOLE of the truly VALUABLE and MODERN MACHINERY for PREPARING and SPINNING FLAX, in the above MILLS.

MR. WHEATLEY KIRK is honoured with instructions from the proprietors, Messrs. Joseph Lobley and Co., who are declining business, to SELL BY AUCTION, on Wednesday, Thursday, and Friday, February 15th, 16th, and 17th, 1854, commencing at Eleven for Twelve A.M., prompt, the WHOLE of the highly valuable and MODERN MACHINERY in their mills, known as the "STEANDER FLAX MILLS," East-street, Bank, Leeds, and which consists of 6648 spindles, with the full and efficient complement of TOW and LINE PREPARINGS, which may be enumerated 2 flax breakers (by Maclea and March, and Messrs. Lawson and Sons, Leeds); 3 hackling machines (by Taylor and Wordsworth); 2 4-head sheet hackling machines (by Marsden, Manchester); 2 6-tool ditto (by ditto); 2 screwing benches, switchers, hackling benches, &c.

IN THE CARD AND LINE ROOM (by Maclea and March, Fairbairn and Co., Lawson and Sons, Taylor and Wordsworth, Newton and Taylor, and others).—Tow shabers, 1 doubler, breaker carding engine, 60 in. on the wire, 3 ft. diam., 3 strippers, 4 workers; 1 ditto, 54 in. on the wire, 3 ft. diam., 5 strippers, 4 workers; 1 ditto, 44 in. on the wire; 1 ditto, 52 in.; 1 finishing ditto, 54 in.; 2 ditto, 54 in.; 2 ditto, 33 in.; 1 ditto, 48 in.; 1 ditto, 60 in.; 2 ditto, 48 in.; 3 first drawing frames, 2 heads each; 3 second drawing frames, 2 heads each; 1 second drawing frame, 3 heads; 2 new roving frames, 48 spindles each, and 8 in. lift (by Newton and Taylor); 1 ditto, 48 spindles, 8 in. lift (by Lawson and Sons); 1 ditto, 36 spindles, 6 in. lift (by Lord and Co.); 1 spreader, 4 bosses (Maclea and Co.); 1 ditto, 2 bosses (Taylor and Co.); 1 ditto, 4 bosses (by Fairbairn and Co.); 1 ditto, 2 bosses (by Lawson and Sons); 4 drawing frames, with 1, 2, and 3 heads each (by Maclea and Marsh, Newton and Lawson); 2 third ditto, 2 and 3 heads each; 3 spiral drag roving frames, 36 spindles each, 6 in. traverse; 1 sheet roving frame, 4 spindles, and 6 in. traverse; 1 new drag roving frame, 12 spindles, and 6 in. traverse; 1 new roving frame, 50 spindles, 8 in. traverse, with regulating cone; 3 roving frames, 48 spindles each, 6 in. traverse; ditto, 36 in. spindles; silver cans, 8, 11, and 13 in. diam., respectively; 6 ditto bobbins; change wheels and pinions, &c.

IN THE SPINNING ROOM (by Lawson and Sons, Newton and Taylor, and others).—Single side spinning frame, 70 spindles, 2 inch lift; 5 double spinning frames, 144 spindles each, and 2¼ in. lift; 4 ditto, 136 spindles each, 2¼ in. lift; 1 single side ditto, 54 spindles, 2½ in. lift; 4 double spinning frames, 108 spindles each; 1 ditto, 140 spindles, 2¼ in. lift; 2 ditto, 120 spindles each, 2 in. lift; 2 single side ditto, 60 and 66 spindles each, 2 in. lift; 2 double ditto, 140 spindles each; 2 single side ditto, 60 and 70 spindles each, and 2 in. lift; 4 double ditto, 150 spindles each, 2 in. lift; 3 single side ditto, 66, 64, and 76 spindles in each, and 2 in. lift; 5 double ditto, 144 spindles each, 2¼ in. lift; 2 ditto, 136 spindles each, 3⅜ in. lift; 2 double ditto, 128 spindles each, 3 in. lift; 6 ditto, 144 spindles each, 2¾ in. lift; 9 ditto, 120 spindles each, and 2½ in. lift; bobbins and skewers for ditto, 2¾ in. lift; 9 ditto, 120 spindles each, and 2½ in. lift; bobbins and skewers for ditto, skip boxes, buckets, change wheels, pinions, speed pulleys, 56 pairs of universal guide pulleys, 17 double, and 2 single reels, &c.

IN THE MECHANICS' SHOPS.—Capital 11½ inch double-geared lathe; 8 inch ditto; 8½ in. single speed ditto; 9½ in. ditto; top driving apparatus; face plates; hand rests, &c.; 2 fluting engines, with slide for rollers; circular saw in frame; grindstone in iron frame; vices, benches, lathe bearers, steel turning tools, drills, mandrils, hammers, braces, and bits, &c.

IN THE STORES.—Oil-pump; Bannister and other brushes; cotton band; new bobbins; new and old brass; copper, lead, and iron piping; steeping nets; castings; models; new cops; yarn poles, pinions, wheels, pulleys, racks, new strapping, large quantity of driving straps.

TALLOW AND WAREHOUSE.—Hand-cart; cast and wrought metal; large quantity of alder wood, in fine condition; 3 large scales and beams; weights; steam-piping to all the gas, steam, and water pipes, joints, taps, elbows, and bearers, throughout the mill, &c.

Particulars in descriptive catalogues, which, with every information, may be had on application to William Sykes Ward, Esq., solicitor, Bank-street, Leeds; Messrs. Joseph Lobley and Co., at the Mills; at the *Patrie* office, Paris; or of the auctioneer, 24, Princess-street, Manchester.

P.S.—The mills and premises, which are four stories high, are to be let, and are admirably suitable for flax, worsted, or woollen mills, or for a machine makers' establishment, and are in the best situation in Leeds for hands, coal, and water. The engines are 70-horse nominal power, and there is a spacious yard, affording ground for erection, if necessary. Apply as above.

GAYTHORN MILLS, MANCHESTER.—TO IRON FOUNDERS, ENGINEERS, MACHINE MAKERS, BROKERS, AND OTHERS.
IMPORTANT SALE of WROUGHT and CAST METAL, BRASS, COPPER, LEAD, &c., STEAM-ENGINE, TWO BOILERS, WROUGHT-IRON SHAFTING, MILL GEARING, &c.

MR. WHEATLEY KIRK is honoured with instructions from James Fernley, Esq., the owner, to SELL, BY AUCTION, on Wednesday, the 8th day of March, 1854, and following days, at Eleven for Twelve A.M., prompt, on the premises called GAYTHORN MILLS, in the City of Manchester, the valuable PROPERTY and EFFECTS, a portion of which was saved from the late fire at the above mills, and the remainder from the Corporation Gas Mill, consisting of ONE 40-horse CONDENSING BEAM-ENGINE (by Boulton and Watt); two steam-engine boilers of 40-horse power each, and in excellent condition; about 600 tons of wrought and cast metal, comprising a large quantity of wrought-iron shafting, spur, bevil, and mitre wheels; pullies, hangers, bearers, wall-plates, boxes, couplings, pillars, spur, and loom shafting; a considerable quantity of wrought and cast scrap iron, bolts and nuts, steel, brass, copper, lead, steam and water-piping; a weighing machine, large and small scales and weights, &c. Also, the ACCOUNT-HOUSE FURNITURE and FIXTURES, consisting of large office desk and stools, cupboards, bookcases, wrought-iron safe, and gas fittings, &c. 116

Catalogues, which will be prepared and issued as speedily as possible, may be had on application at the auctioneer's offices, 24, Princess-street, Manchester; or by post on receipt of eight postage stamps.

GRIFFIN FOUNDRY, CHESTERFIELD.
TO ENGINEERS, MACHINE MAKERS, SMITHS, BROKERS, AND OTHERS.

MR. WHEATLEY KIRK is instructed by Messrs. Waller and Co. (who are declining the fitting-up department, in order to prosecute the foundry trade alone), to SELL, BY AUCTION, early in the month of March, the WHOLE of the valuable STOCK IN TRADE, TOOLS, UTENSILS, &c., used in the said engineering and fitting department, among which may be named:— 117
FITTING SHOPS.—Double-geared, self-acting slide lathe, with 16-in. centre sticks, on cast metal bed, 25 ft. long, with top driving apparatus, &c.; one 12-in. geared lathe, on same bed. (These may be divided, as the bed is in halves). One 9-inch headstocks, planing machine, unfinished, to plane 3 feet 6 inches long, by 9 wide, and 2 feet 9 inches deep, working by a screw; drilling machine and counter to two drilling stocks, drills and braces, screwing tackle, of various sizes; cast-iron turning tools, rosebits and boring heads, vices, chisels, hammers, files, shafting boxes, blocks and ropes, two single purchase crabs, &c.
SMITHS' SHOP:—Bellows, anvils, swages, tue irons, slake troughs, carpenter's inch, &c.
IN STOCK-IN-TRADE embraces new 4-horse horizontal engine (nearly finished), 6 in., stroke 14 ins.; old double boiler, weighing about 30 cwts.; kitchen fitted and unfitted; sham register fronts, sham stove castings, sundry stove register patterns, seven lengths new (3 ft. 6 in.) hurdles (14 yards), stable fittings, racks, and mangers; oats and straw choppers and cutters, new brick machine, spring, rain and water piping, various, with heads and slides for the same; seven-gallon liquid manure pump, blistered, cast, and double sheared steel; letter copying press, beams and scales, &c.
Particulars in catalogues, which may be had at the offices of the auctioneer, 24, Princess-street, Manchester, and 4, Kirkgate, Leeds, or at the works at Chesterfield, where the whole may be seen in motion up to the morning of the sale.
The tenancy and goodwill of this, the fitting and engineering department of Messrs. Waller's business, may be negociated for by private treaty, or at the time of sale.

AT GARGRAVE, AND ALSO AT SKIPTON IN CRAVEN.
PRELIMINARY ANNOUNCEMENT.—TO RAILWAY CONTRACTORS, ENGINEERS, MINERS, BUILDERS, BROKERS, AND OTHERS. 110
IMPORTANT SALE of the truly valuable PLANT of a RAILWAY CONTRACTOR, including a strong and powerful LOCOMOTIVE ENGINE and TENDER in thorough repair, with copper tubes of large diameter, suitable for burning coal; 350 capital earth waggons, with most excellent wrought-iron axles, and strongly ironed; about 100 tons of contractors' rails, 45 lbs. to the yard, but little worn; numerous travelling cranes; double and single purchase crabs; pile-driving engine; goliahs; broad and narrow-wheeled carts; several first-rate stone waggons; wheelbarrows, picks, mattocks, chains, blocks, ropes; mechanics' tools, including a most excellent 14 in. centre double-geared slide lathe, on cast metal bed, 20 ft. long, complete, &c. A vast assemblage of sleepers, timber, wrought and cast iron, brass, copper, lead, &c. Also, all the valuable BUILDING MATERIALS, including the extensive range of carpenters' and smiths' workshops, storehouses, manager's house, &c., built of wood, glass, lead, iron, &c.

MR. WHEATLEY KIRK is honoured with instructions from George Thornton, Esq., the eminent contractor, to SELL, BY AUCTION (in consequence of the completion of his contract), early in March next, the WHOLE of his valuable PLANT lying at Gargrave, and Skipton in Craven.
Particulars in future papers, and descriptive catalogues, which are being prepared and may be had at the offices of the auctioneer, 24, Princess-street, Manchester, and 4, Kirkgate, Leeds.
The plant is admirably situated for removal to any distance, being closely contiguous to railway and canal.

PURCHASERS OF STEAM-ENGINES, BOILERS, and TOOLS, of every description, NEW or SECOND-HAND; also, RAILS, WOOD and SLEEPERS, CONTRACTORS' PLANT, WAGGONS, LOCOMOTIVES, ENGINES, &c., may be SUPPLIED to advantage on application to WHEATLEY KIRK, Princess-street, Manchester, full particulars of which are fully set forth in his Circular, which may be had on application, or by post on receipt of two stamps.

CONDENSING MARINE ENGINE, 20-horse power, cylinder 22 in., and stroke 2 ft. 6 in. This engine may be seen at work (and only comes out room for a 40-horse engine), cylinder re-bored, new metallic piston, new and all its working parts have been renewed within the last 18 months.—Apply to WHEATLEY KIRK and CO., 24, Princess-street, Manchester. 120

A HIGH-PRESSURE DIRECT-ACTING STEAM-ENGINE, bore of cylinder 12 in., stroke ft. The above is a most excellent engine.—Apply to WHEATLEY KIRK, 24, Princess-street, Manchester. 121

TWO SPLENDID HIGH-PRESSURE COLUMN ENGINES, coupled, with one fly-wheel, governor, and force pumps, complete. These engines are by the celebrated firm of Wm. Fairbairn and Co., of Manchester, and are in first-rate condition, and will be sold a bargain.—Apply to WHEATLEY KIRK, 24, Princess-street, Manchester. 122

FOR SALE, a 50-horse HIGH-PRESSURE BOILER.—A STRONG TUBULAR LOCOMOTIVE-BUILT BOILER (upwards of 6 tons), with fire brake boxes, 18 ft. long, and 5 ft. diameter, only been in use about two years. Fittings consist of wrought-iron dome steam-chest, double safety-valves, with patent spring balances attached, water-gauges, &c.—Apply to ALEX. ROBERTSAVIA Tin Mills, Upper Holloway, London. 123

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(LA GRANDE BRASSERIE DE PARIS). 124
Société en Commandite.—Registered 18th May, 1853.
Capital £40,000 (with power to increase), in 10,000 shares of £4, or 100 fr., each, payable to bearer.
No further liability.—Deposit £2, and £2 on the 1st of May, 1854.
The shareholders are informed that the society has completed the purchase (for the very moderate sum of £5000), of suitable freehold ground in the Paysage de l'Elysee, Faubourg St. Honore, with a double frontage of nearly 300 ft.; and that permission to establish a brewery thereon has, at last, been obtained from the Government.
Immediate application must be made for the remaining shares to Messrs. Rymer, Murray, and Rymer, 5, Whitehall; or E. Caxenove, Esq., 39, Lothbury; and in Paris, at the Bureau, 12, Place Vendome.
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Registered Provisionally under 7th and 8th Vic. cap. 110.
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BROKERS—Messrs. Crosley Brothers, 30, Cornhill, London.
CHEMICAL ADVISER—Robert Dundas Thomson, Esq., M.D., Prof. of Chemistry in St. Thomas's Hospital, London.
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THE CRYSTAL PALACE DISTRICT GAS COMPANY.
NO FURTHER APPLICATIONS FOR SHARES in the above company will be RECEIVED after MONDAY the 20th February inst. 126
By order of the Board, JOHN DOWNES, Sec.
Offices, 38, Moorgate-street, London, Feb. 6, 1854.

FUEL AND GAS.—An English gentleman, the proprietor of several hundred acres of peat bog, which has been fairly opened, and so far drained that almost an unlimited quantity could be cut, with the facility of canal carriage to Dublin, wishes to find a CAPITALIST to JOIN in WORKING IT, who would purchase, take, or work the same at a royalty. Liberal terms will be granted. The peat is so dense and good that its calorific power is equal to that of coal, and the yield of gas from it is 9600 cubic feet per ton, of 14 candles illuminating power. The present surface, by proper cultivation, produces most excellent crops, and if the peat were cut off to the depth of 12 or 14 ft. the soil would be better even there than on the surface. Address, "Delta," care of Thos. Keates, Esq., 14, Chatham-place, Blackfriars, London.

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J. Lee Stevens, Esq., 60, King William-street, City, London.
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DEAR SIR,—The perfect action of your PATENT SMOKELESS FURNACE gives us more thorough satisfaction than we first anticipated. It enables us to use tan, with a very slight mixture of small coals, to much economical advantage; it effectually cuts off the smoke, saving us proportionably in the quantity (as well as in the price) of fuel; and our stoker informs us he can now get up steam in twenty minutes, which took him three quarters of an hour to do before, and it is consequently a gain to us in every respect. We shall be happy to show your admirable invention, in working hours, to our neighbours, and so any friends of yours who present your card.
J. Lee Stevens, Esq., 1, Fish-street Hill, City. P. AND JAS. MARGETSON.
Champion's Vinegar and Mustard Works, Old-street-road, London, Feb. 3, 1854.
DEAR SIR,—The patent furnace you have erected for us satisfactorily proves the efficiency of your plan, and we think its simplicity and cheapness cannot fail of securing commercial preference. At your convenience, we shall be obliged by your giving us an estimate for one to be put up to our brewing copper.
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J. Lee Stevens, Esq.
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SIR,—We are very happy to add our testimony to the many evidences in favour of your invention already published. As your PATENT SMOKELESS FURNACE has been applied to a new boiler on our premises, we have no opportunity of contrasting the present with any previous consumption of fuel; but our steam is got up readily, and is most efficiently maintained by the use of small coals only; and the prevention of smoke is satisfactorily effected beyond the possibility of complaint.
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5000	Callington (lead, copper), Callington	7l. 17s.	2⅜		1 8 0	0 4 0—Sept. 1847.
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256	Condurrow (copper, tin), Camborne	20	120	122½	43 0 0	3 0 0—Dec., 853.
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1024	Gonamena (copper), St. Cleer	12¾	11	12	0 7 6	0 7 6—Dec., 1852.
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25000	Great Onslow Consols, Camelford	1½	—		0 2 0	0 2 0—June, 1852.
13750	Great Polgooth (tin), St. Austell	3¼	2¼		0 10 0	0 4 3—Oct., 1852.
119	Great Work (tin), Germoe	100	155		166 10 0	5 0 0—Nov., 1853.
1024	Herodsfoot (lead), near Liskeard	8¼	9¼	9¼ 9	2 5 0	0 7 6—Dec., 1853.
1000	Holmbush (lead, copper), Callington	25	5		25 0 0	— —Feb. 1844.
2000	Holyford (copper), near Tipperary	11	7		3 5 0	0 5 0—Sept., 1852.
76	Jamaica (lead), Mold, Flintshire	3l. 13s. 6d.	20		380 0 0	5 0 0—March, 1851.
20000	Kenmare and West of Ireland	1	1	⅝ ⅝	0 1 6	0 1 6—Sept., 1853.
786	Kirkcudbrightshire (lead), Kirkcudbright	9¾	4		1 10 0	0 5 0—Sept., 1853.
20000	Lackamore (copper)	1		½	0 1 0	0 1 0—July, 1853.
20	Laxey Mining Company, Isle of Man	100	1300		— —	— —
5000	Lewis (tin, copper), St. Erth	3l. 8s.	2½		0 2 0	0 2 0—Aug. 1851.
160	Levant (copper, tin), St. Just	2½	92½	93	1038 0 0	2 0 0—April, 1853.
400	Lisburne (lead), Cardiganshire, Wales	18¾	212½		196 5 0	5 0 0—Nov., 1853.
6000	Marke Valley (copper), Caradon	4l. 10s. 6d.	5	5	0 2 6	0 2 6—May, 1853.
5000	Mendip Hills (lead), Somerset	3¾	2¾		0 10 0	0 10 0—May, 1853.
5000	Merllyn (lead), Flint	2¾	1	1	1 11 0	0 2 6—June, 1853.
5000	Milwr (lead), Flintshire	3	2		0 4 0	0 4 0—Oct., 1851.
20000	Mining Co. of Ireland (copper, lead, coal)	7	16	15¾	9 2 0	0 10 6—Jan., 1854.
15000	Nantille Vale (slate), Llanllyfin	1	2		0 2 6	0 1 3—Nov., 1853.
470	Newtonards Mining Company, Co. Down	50	70		31 0 0	2 0 0—Jan., 1854.
200	North Pool (copper, tin), Pool	22½	200	200	298 0 0	5 0 0—Dec., 1853.
140	North Roskear (copper), Camborne	10	145		249 10 0	4 0 0—Sept., 1853.
6000	North Wheal Basset (copper, tin), Illogan	nil.	8		2 16 0	0 5 0—Jan., 1854.
6400	Par Consols (copper), St. Blazey	1¼	9		23 6 0	0 10 0—July, 1853.
500	Peak United (lead), North Derbyshire	7¾	15		1 0 0	1 0 0—June, 1853.
160	Perran St. George (cop., tin), Perranzabuloe	21¾	32½		1 15 0	0 10 0—June, 1851.
200	Phœnix (copper, tin), Linkinghorne	30	750		240 0 0	10 0 0—Dec., 1852.
000	Polberro (tin), St. Agnes	15	13		4 5 0	1 0 0—Dec., 1852.
580	Providence Mines (tin), Uny Lelant	20¾	35		20 4 6	0 15 0—May, 1853.
1948	Rix Hill (tin), Tavistock	3¾	2		0 8 0	0 4 0—Jan., 1853.
25200	Rorrington (lead), Snailbeach, Shrewsbury	1	¾	¾	0 2 2	0 2 2—July, 1852.
256	South Caradon (copper), St. Cleer	2½	400	390	302 0 0	12 0 0—Feb., 1854.
9000	South Tamar (silver-lead), Beerferris	1l. 6s. 6d.	6¾	6¾ 7⅛	1 2 6	0 2 6—Jan., 1854.
256	South Tolgus (copper), Redruth, Cornwall	16	157⅛		69 0 0	4 0 0—May, 1853.
248	South Wheal Frances (copper), Illogan	37¾	257½	250	232 5 0	4 0 0—Jan., 1854.
1024	Spearne Consols (tin), St. Just, Cornwall	1¾	8¾		8 8 6	0 2 6—Dec., 1853.
1024	St. Aubyn and Grylls (copper, tin), Breage	3	6		0 17 6	0 7 6—April, 1852.
94	St. Ives Consols (tin), St. Ives	80	125		880 0 0	5 0 0—Feb., 1853.
1000	Stray Park and Camborne Vean (copper)	10¾	13	12⅛	2 10 0	— —
9600	Tamar Consols (silver-lead), Beeralston	4½	1⅞	2	4 11 0	2 0 0—Feb. 1853.
6000	Tincroft (copper, tin), near Pool, Illogan	7	5¾	1⅝	6 18 6	0 10 6—Feb. 1853.
1024	Trehane (silver-lead), Menheniot	1½	8¾	8¾ 9¼	5 11 3	0 10 0—Dec., 1853.
5000	Treleigh Consols (copper), Redruth	6	1¾		1 3 0	0 5 0—Oct., 1847.
572	Trelyon Consols, (tin), St. Ives	6¾	27		0 15 0	0 15 0—May, 1853.
96	Tresavean (copper), Gwennap, Cornwall	32½	210	215	4680 15 0	— —1848.
120	Trethellan (copper), Gwennap, Cornwall	7½	16½		402 10 0	— —April, 1851.
120	Treviskey and Barrier (copper), Gwennap	130	40	42 41	299 10 0	2 0 0—Jan., 1854.
4096	Trewetha	2¾	5¼	4⅞ 5	0 5 0	0 5 0—Dec., 1853.
100	Trumpet Consols (tin), near Helston	95	150		45 0 0	5 0 0—Dec., 1853.
400	United Mines (copper), Gwennap	40	200	190 195	47 5 0	2 0 0—Feb., 1854.
1024	Wellington (copper, tin), Perranuthnoe	8¼	3		2 2 6	0 5 0—March, 1851.
256	West Caradon (copper), Liskeard	20	285	275 280	234 5 0	7 0 0—Dec., 1853.
1024	West Providence (tin), St. Erth	5	37	36 37	22 0 0	2 0 0—Jan., 1854.
1024	West Wheal Darlington	12l.	5		0 5 0	0 5 0—Dec., 1853.
1024	West Wheal Treasury (copper)	10l. 4s.	4	4½	0 10 0	0 10 0—May, 1853.
1228	Wheal Arthur (copper), Calstock	9	32½	32	0 10 0	0 10 0—Dec., 1853.
256	Wheal Basset (copper), Illogan	10¼	750	750	495 0 0	25 0 0—Jan., 1854.
256	Wheal Brewer (copper), Gwennap	4	14		5 0 0	— —
256	Wheal Buller (copper), Redruth	5	1175	1200	441 5 0	40 0 0—Jan., 1854.
250	Wheal Clifford (copper), Gwennap	—	120		3 13 8	2 5 6—March, 1853.
4280	Wheal Exmouth and Adams United	4l. 14s.	9½		0 17 6	0 2 6—Feb., 1854.
100	Wheal Friendly (tin), St. Agnes	70	20		5 0 0	5 0 0—1850.
128	Wheal Friendship (copper), Devon	—	105		2367 10 0	8 0 0—Oct., 1853.
5000	Wheal Golden (sil.-lead), Perranzabuloe	4	1¼	1⅛ 1¾	1 5 0	0 5 0—Sept., 1852.
6000	Wheal James (iron, copper), Roche	1	⅞		0 2 0	0 2 0—May, 1853.
512	Wheal Jane (silver-lead), Kea	nil.	25	22¾	4 10 0	1 0 0—Oct., 1853.
430	Wheal Lovel (tin), Wendron	33	55		24 0 0	4 0 0—Nov., 1853.
112	Wheal Margaret (tin), Uny Lelant	79	130	125	202 0 0	6 0 0—Nov., 1853.
512	Wheal Mary Ann (lead), Menheniot	5¼	38	36	26 15 0	2 0 0—Dec., 1853.
80	Wheal Owles, St. Just, Cornwall	70	520		123 3 0	12 10 0—Nov., 1853.
240	Wheal Reeth (tin), Uny Lelant	20½	19½		40 10 0	3 0 0—Sept., 1852.
198	Wheal Seton (tin, copper), Camborne	107	210		236 10 0	4 0 0—Dec., 1853.
520	Wheal Trelawny (silver-lead), Liskeard	8½	37½	36¼ 37½	41 10 0	2 0 0—Jan., 1854.
1024	Wheal Tremayne (tin, copper), Gwinear	9¾	11½	9¾ 11¼	10 2 6	0 7 6—Jan., 1854.
5000	Wicklow (copper), Wicklow	5	58	58	21 8 0	1 10 0—July, 1853.
15000	Wrysgan (slate), Festiniog	1	1⅞	1⅞	0 1 0	0 1 0—Oct., 1853.

FOREIGN MINES.

Shares.		Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
5000	Alten Mining Company (copper), Norway	£14½	5	5	4 5 0	0 15 0—Nov., 1853.
72000	Baden, Grand Duchy of	1	¾	½ ¾	0 1 0	0 1 0—Nov., 1852.
10000	Brazilian Imperial (gold), Brazil	25	5½	5¼ ⅝	34 17 6	0 10 0—Dec. 1844.
2464	Burra Burra (copper), South Australia	6	163	164	135 0 0	5 0 0—March, 1853.
12000	Cobre Copper Company (copper), Cuba	40	45	44¼ 43	61 12 0	2 0 0—Jan., 1854.
10000	Copiapo Mining Company (copper), Chili	15	14	13	3 18 0	0 5 0—Oct. 1851.
20000	General Min. Assoc. (iron, coal), Nova Scotia	20	16	14 16	8 0 0	0 10 0—June, 1853.
10000	Linares (lead), Pozo Ancho, Spain	3	10¾	10½	1 5 6	0 12 6—Sept., 1853.
103815	Mariquita and New Granada	1	⅜	1 ⅜	0 2 0	0 1 0—July, 1853.
29000	Mexican and South American (cop.), Mexico	9	6¾	6¾	5 5 0	0 7 6—Dec., 1853.
32000	Obernhof (lead), Nassau	1	1⅛	1 1¼	0 1 0	0 1 0—June, 1853.
17000	Royal Santiago (copper), Cuba	13	5	5 5¼	33 4 0	1 5 0—July, 1848.
104000	San Fernando (silver-lead), Linares	1	1⅛	1 1¼	0 3 0	0 3 0—Dec., 1853.
11000	St. John del Rey (gold), Brazil	15	30	29	23 17 6	2 0 0—Nov., 1853.
43174	United Mexican (silver), Mexico	Av. 28¼	3¼	3¼ ½	1 16 6	0 4 0—Feb. 1853.

NON-DIVIDEND FOREIGN MINES.

Shares.		Paid.	Last Price.	Present.
75000	Adelaide Land and Gold Comp.	2	1½	1 1¼
35000	Almaden (silver-lead), Spain	2	2¾	2¾
19000	Australian (cop.), S. Australia	6	2¼	2¼ 2½
6000	Barossa Range	1½	—	—
75000	Brucutu (gold), Brazil	½	1s. 3d.	1s. 3d.
70000	Clarendon Consols, Jamaica	¼	⅜	⅜ ⅜
120000	Gladbach (zinc) Rhenish Prus.	1	1	¾ 1
12000	Jamaica (copper)	1	1½	1 1⅛
2369	Kinzigthal Min. Ass., Germany	4	1¾	1¾
24000	Liguanea & Gen. Min. Co. of Ja.	1	⅜	⅜ ⅞
60000	Linares, New, (lead, cop.), Spain	1	⅜	¾ 1
22000	Louise, Rhenish Prussia	1	1⅜	1 1⅛
17000	Metcalfe (copper), Jamaica	1	1¾	1⅛ 1¾
25000	Monarch Gold	½	⅜	⅜
25000	Nassau (cop.), Rhenish Prussia	1	1¾	1 1¼
10000	National Brazilian (gold), Brazil	30	2⅜	2⅛ 2¼
104000	North British Australasian	1	1¼	1⅛ 1¼
25000	Peninsular Mining Company	¼	1½	1⅜
10000	Pontgibaud (sil.-lead), France	20	20	17 19
25000	Port Royal and St. Andrews	¼	⅜	⅜ 1
100000	Rhenish Mining Company	¼	½	¼ ⅝
80000	Upper Canada (copper)	¼	⅜	⅜
100000	Worthing (cop.), Adelaide	12s	⅜	⅜

MINES WHICH HAVE SOLD ORES.

Shares.		Paid.	Last Price.	Present.
500	Albion (porcelain & bleach. clay)	5¼	5¼	
3000	Altarnun Con. (tin, cop.), Altar.	2	2	
4000	Augusta Con. (cop.) Bridestowe	1¾	¼	
940	Balmoon Con. (tin), Uny Lelant	—	3½	3
4081	Balleswidden United	1	⅜	
508	Bell and Lanarth, Gwennap	11	14	11
8000	Bicton Consols (lead), St. Ives	1½	1¼	
8000	Birch Tor and Vitifer, Lydford	£2 4 6	1⅝	⅞ 1¼
2000	Bishopstone United	1	1¼	
4000	Ditto Glamorgan	¼	—	
20000	Bodmin United	13s. 9d.	1⅛	
144	Bodmin West Downs (tin, cop.)	1	1⅛	
120	Bollowall and Nanpean (tin)	29	15	
4096	Boringdon Consols, Plympton	3¾	2¼	2¼
240	Boscean (tin), St. Just	20½	90	
2400	Bosorn (tin), St. Just	1	½	
8250	Bottle Hill (copper), Plympton	4	1¼	
4000	Braich Goch Slate Quarries		½	
4000	Bronfloyd (lead), Wales		½	
2390	Bryn-Arian (lead), Cardiganshire	3¾	¼	¼
420	Budnick Consols (tin), Perran	1¾	6	6
2000	Bwich (sil.-lead), Cardiganshire	4	3	
5000	Cae-Gynon, Cardiganshire	⅜	1	
1024	Caerphilly & Carfnnon, S. Wales	3	4	
3000	Cally (cop., lead), Kirkcudbright	£1 2s.	¾	
4000	Calstock Consols (copper)	£3 1	3	4
4000	Calstock United (tin and cop.)	3¾	2¼	2
1000	Camborne Consols	1½	50	
1024	Caradon Consols, St. Cleer	2¾	10½	10¼
2000	Carbona (tin, copper), Crowan	6¾	1½	1½
2048	Carnyorth (tin), St. Just	1¾	1¾	
1056	Carvansall (copper), Gwennap	£9 14 5	7½	6½
4096	Castle Dinas (tin), St Colomb	£1 12 3	1⅝	1¼ 1
200	Cefn Brwyno (lead), Cardiganshire	33	110	
9000	Charlestown United, Cornwall	£1 3	3	
2000	Clara	1	1¾	1¾
1024	Clijah & Wentworth (tin, cop.)	7	8	7 8
2000	Coed Mawr Pool (lead), Llanrwst	£6 8	10	
2510	Cook's Kitchen, Illogan	£15 18 9	3¾	3
900	Court Grange, Cardiganshire	10	10	
1055	Craddock Moor (cop.), St Cleer	£7 6s.	10½	
10000	Craigwen	½	½	
600	Craig-y-Mwyn (lead), Llanrhiadr	8¾	7	
512	Creegbrawse (copper), Cornwall	13¾	35	
1500	Crookhaven (copper), Cork	10	14	
6000	Crow Hill, Ireland	£1 3 6	1¾	
6400	Crow Hill, St. Steph.	1	2¼	
9000	Cubert (silver-lead), Cornwall	2½	⅜	⅜
10000	Cwm Darren (lead), Cardigansh.	13s.	⅜	⅜
10000	Cwmdyle Rock & Green Lake	3	1¼	
1000	Cwm Erfin (lead), Cardiganshire	8	4	
2000	Cyfannedd Fawr, Lanegryn	¼	1	
3000	Dalrhiew (cop., lead), Brecon	£2	4	
1000	Darren (sil.-lead) Cardiganshire	4¾	3	2¾
7200	Derwent (sil.-lead), Durham	12	4	
8907	Devon and Courtenay (copper)	¾	¾	
1024	Devon & Cornwall United (cop.)	10¾	20	
4000	Devon Burra Burra (copper)	1¾	11	12⅛
1600	Devon Great Tincroft (tin)	¼	1	
6000	Devon Kapunda (cop. & sil.-lead)	£3 13	1½	
5000	Drift Moor (tin), Sancreed	1	1⅜	
1244	Duke of Cornwall, Lostwithiel	£7 14	6	
3000	Dyfngwm (lead), Wales	11¾	12	
256	Eaglebrook, Llanphangel, Card.	12½	50	
4096	East Alfred Consols (lead, cop.)	16s. 6d.	¾	¾
256	East Basset (copper), Redruth	18	30	
1500	East Birch Tor [A] (tin), Devon	3	3¾	
1000	East Birch Tor [B]	1¾	1⅜	
6000	East Bosorn	¾	¾	
1948	East Crowndale (cop.), Tavistock	6½	5¾	
1024	East Ding Dong (tin), Madron	£2 18	3¼	
4000	East Gunnis Lake June. (cop.)	1¾	1⅜	1¼ 1⅜
1024	East Halamanning (tin)	1	⅜	
6000	East Kitt Hill	1	2	
512	East Seton & W. Maude, Redruth	11¾	1¼	
9000	East Tamar (sil.-ld.), Beerferris	£1 19	¾	¾ ¾
256	East Tolgus (copper), Redruth	12	19½	17
4000	East Wheal Arthur	7s.	¼	

Shares.		Paid.	Last Price.	Present.
2048	East Wheal Bedford, Tavistock	2¼	2	
2048	East Wheal George, Walkhamp.	2¾	5	
512	East Wheal Leisure, Perran	16	10	
1024	East Wheal Margaret (tin, cop.)	5¾	12½	12
4000	East Wheal Russell, Tavistock	£3 3 6	5½	5¼
3300	East Wheal Vor (tin)	£1 4	⅛	
564	Ecton Mountain, Derbyshire	10	12½	
536	Ecton Mountain (lead, copper)	5	5	
1280	Esgair Llee, Llanfihangel-y-Croy	7	13	
5000	Fat-work & Wh. Virtue, St. Col.	£1 2	⅛	
15000	Fron-isa and Craigiog (lead)	1	¼	
12000	Gallt-Ffrith-Rhedyn (lead)	3	3	
5000	Garreg (lead), Flint	£2 4	⅛	
2048	Gaetr-n (copper) Wales	—	5	
2500	Georgia Consols (tin), St. Ives Gilmar	5¾	3 6½	5
12000	Gorn (lead), Llanidloes	12s.	⅜	
243	Grambler & St. Aubyn (copper)	97¼	23	
900	Great Beam (tin), St. Austell	20	24	
6750	Great Bryn Consols (cop., tin)	1½	⅜	
4000	Great Cowarch, Merioneth	3¾	3½	4¼ 4
30000	Great Crinnis (copper)	1	2	1⅜ 2
10000	Gt. Tregune Consols, Aitarnun	1	5	
10000	Great Treveddoe, Warliggan	2	3	
1024	Great Wheal Alfred, Phillack	28¾	33	31 33
5120	Great Wheal Baddern (tin)	2¾	1½	1½ 1⅝
200000	Gt. Wh. Vor (tin, cop.), Helston	1	1⅛	
1026	Gustavus Mines, Camborne	8l. 5s. 11d.	3	
6000	Gwaynlliffion (lead)	3s. 6d.	⅛	
512	Halamanning and Croft Gothal	90	20	
512	Hawke's Point, Uny Lelant	9¾	3	
8192	Hawkmoor (tin & cop.), Calstock	£1 6d	1¼	¾
5000	Haytor Consols (tin, copper)	4	14	
1500	Hennock (silver-lead) Hennock	£7 16	3¾	
6000	Hingston Down Cons. (copper)	3¾	15	14½ 16
5000	Holne Moor (tin), Ashburton	2	5	
5000	Hope Valley (lead)	1	4	
2048	Kea Tremayne (tin)	nil.	1¾	
1024	Kenneggy (copper), Breague	8s. 2d.	3	
6000	Keswick (lead), Portinscale	£4 2	2½	
3300	Kilbricken (silver-lead), Clare	4¾	2¾	
1698	Lamherooe Wheal Maria (cop.)	18	3	
1024	La Min (copper), Gwinear	4	4¼	
252	Lanarth Con. (cop.), Gwennap	4	4	
6000	Langford and Baring	£1 1 6	⅛	⅛
1024	Leeds and St. Aubyn (tin, cop.)	3¼	5½	6
12000	Leeds Town (tin, cop.), Crowan	2¾	1¼	
256	Lelant Consols (tin), Uny Lelant	65¾	17½	
4000	Loveden United (lead), Cardigan	⅞	⅜	
20000	Ludgvan Lease (tin), St. Ives	⅛	⅛	¼
1024	Melin Llyn-y-Pair, Merioneth	2¼	12½	
246	Mengearne and Treguntis (tin)	8	8	
256	Messer, near Bodmin	—	130	
4096	Middleton (lead), Snailbeach	4s.	¼	
1024	Mill Pool (tin, cop.), St. Hilary	5	7	7⅛
6134	Mineral Court (tin), St. Austell	⅛	⅛	
7500	Mixon Great Cons. (cop.), Leek	1	1¼	
10000	Molland (cop.), South Moulton	16s.	⅜	
1024	Mount Tiack (tin, cop.), Lelant	1	1⅛	
5000	Nanteos and Penrhiw	1¼	1¼	
3000	Nant-y-Car (cop.), nr. Rhayader	3l. 4s.	7	
1024	North Abram (copper), Crowan	⅛	⅛	
1024	North Buller (copper), Redruth	£9 4	8½	8
6000	North Damsel (cop.), Gwennap	1	¾	
1024	North Ding Dong (tin), Madron	1	1¼	
2000	North Downs (copper), Redruth	1	4	
2500	North Frances (cop.), Illogan	3	3½	
2000	North Levant (tin, cop.) St. Just	1¼	8½	
21000	North Staffordshire Consols	1	1	
2000	North Tamar (silver-lead, cop.)	1	6s.	
10000	North Towy and Cystanog	4s. 6d.	⅜	
1200	N.W. Buller, or Gt. South Tolgus	9	7	
1024	North Wh. Robert, Walkampton	7¾	9	
1060	North Wheal Trelawny	1¾	8	
12000	N. Wh. Unity (cop., tin), Gwin.	1½	1	
2000	Ockment (cop., sil.-lead), Devon	1¾	1¾	
2048	Okel Tor (lead), Calstock	£3	3	3½
10000	Old Trewether Consols	1	—	
256	Old Wheal Basset, Illogan	4	6½	
2500	Orsedd (lead), Flint	2¾	2	
12000	Parkwyn and Carwalsick	1	1	
10240	Pembroke & East Crinnis (cop.)	5	5	
1500	Pencraig (lead), Carnarvon	4	1	
5000	Pendarves & St. Aubyn (tin, co.)	£1 2	⅛	
5000	Penhale Consols (silver-lead)	3½	6	
128	Penmaen, Merioneth	—	130	130
640	Pen-y-Gelli (lead), Flintshire	5	8	
2925	Penzance Consols	1¼	⅛	
1000	Peter Tavy & Mary Tavy (cop.)	5½	6½	
2000	Polgear & Lancarrow (cop., tin)	£2 3	⅛	⅛
50000	Poltimore (cop., gold), Devon	1	1¼	1¼
2400	Porkellis United (tin), Wendron	10	9¾	
1024	Praed Con. (tin), Towednack	1½	⅜	
6400	Prideaux Wood, Luxillyan	1¼	4	
3072	Prince Albert, Perranzabuloe	2¼	2	
6400	Prockter United (lead, antim.)	1	1	
480	Raleigh, (tin, copper), Crowan	7¾	7⅛	
7000	Reeth Consolidated, Towednack	4¾	1½	
10000	Respryn (copper), Lostwithiel	2	2	
2500	Rhosmydol & Bacheiddon (lead)	11¼	6	
10000	Rinsey United	1	1¼	1⅛ 1¼
5000	Rocks and Treverbyn (tin)	£5 16	4	
256	Rosewarne (cop., tin), Gwinear	17	18	
5000	Round Hill, Salop	18s.	2	
4000	Sithney Wheal Buller (tin)	1	5	
1000	Skiddaw & Blencathera, Keswick	11s.	2¼	
2000	South Carn Brea (cop.), Illogan	12¾	4	2
256	South Charlotte, St. Agnes	3	3¾	
5000	South Crenver (copper)	£3 13	3¾	
4196	South Friendship Wheal Ann	2¾	2	
2000	South of Scotland	2¾	¾	
3300	South Speed, Uny Lelant	3	2	
4096	South Wheal Ycoland	¾	2	
280	Spearne Moor (copper), St. Just	30	30	
6144	St. Austell Consols	£1 9	1¾	
128	St. Blazey Consols, St. Blazey	67½	—	
20000	St. Day United (tin & copper)	2	2¼	
512	St. Michael Penkevil (tin)	4	1¾	
999	St. Minver Consols (silver-lead)	1	1	
1200	Swanpool, Budock	7	10¼	
20000	Tassan (lead), Ireland	⅛	⅜	
4944	Tavy Con. (cop.), near Tavistock	38s.	3½	⅜
6400	Tees Side (lead), Camberland	1½	1¼	
1000	Tokenbury Con. (cop.), St. Ives	3¾	4	
12000	Trannack and Bosence, St. Erth	7¾	4⅜	
1024	Trebarvah, Perranuthnoe	3¾	6	6⅜
4096	Treburget United (lead) St. Teath	£1 19	1	
600	Tregardock (lead), St. Teath	4	13	
4096	Trebell Con. (tin, cop.), Lanivet	£1 6	⅛	⅛ ⅜
10000	Treloggan, St. Colomb Minor	1¼	2	
5000	Treloweth (copper), St. Erth	£1 19	8	
8900	Trenault (lime, copper)	1	⅜	
3100	Ditto Preference	1	1¼	
10000	Trevalga (slate), Boscastle	1	1	
2048	Trevelyan (tin, copper)	3	2¼	
2300	Trevenen (tin), Wendron	1¾	2¼	
3200